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ABSTRACT

This thesis describes a Policy Delphi study which was conducted to initiate discussion on sensitive policy questions among members of the Board of Trustees of the Pacific Telecommunications Council (PTC), an international, non-profit organization created as a permanent forum to promote the development, understanding, and beneficial use of telecommunications in the Pacific area. The three-part study includes a description of the events which led to the creation of the PTC and the activities and projects it has sponsored; an explanation of the Policy Delphi, a future and policy-oriented research method which supports the use of subjective expertise to reduce uncertainty about the future; and three scenarios based partly on the data gathered in the Delphi which depict possible future roles of the PTC as a council with either high, moderate, or diminishing activity. The appropriateness of both the Delphi and the scenarios as techniques for studying the problems addressed by the study are analyzed, the steps used in conducting the study are traced, and the PTC Policy Delphi final report and the actual scenarios are presented. Appendices provide the Policy Delphi questionnaires and preliminary reports. Twelve references are listed. (LMM)

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ORIGINS, GROWTH AND FUTURE DIRECTIONS OF THE PACIFIC TELECOMMUNICATIONS COUNCIL:

AN INTERNATIONAL POLICY DELPHI STUDY

A THESIS SUBMITTED TO THE GRADUATE DIVISION OF THE
UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

IN COMMUNICATION

DECEMBER 1981

By

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Abstract

This thesis is the case study of a young and unique international organization, the Pacific Telecommunications Council (PTC or Council). The study is in three parts: First, the history of the Council was developed, second a two-round international Policy Delphi was conducted, and third, three scenarios were created depicting alternative futures of the PTC. The history was plotted by systematically examining the available documents leading up to the incorporation of the PTC and its activities since that time. The Policy Delphi study was conducted to initiate discussion on sensitive policy questions. The issues explored included Council activities, Council membership, Council information services, and the future plans of the Council. The PTC Board of Trustees were chosen to respond to the Policy Delphi. The study began in July, 1980 and was completed in December, 1980. The Policy Delphi is a future and policy oriented method based on the use of expert opinion. It is a method which supports the use of subjective expertise to reduce uncertainty about the future. This method is one of the several new methods which has been developed to improve our ability to examine the future. The scenarios project possible future roles of the Council including a Council with high activity, moderate activity and diminishing activity. They are based in part on the data gathered in the Policy Delphi.

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CHAPTER 1

INTRODUCTION

Description of the Study

This study consists of three parts: A documentation of the history of the Pacific Telecommunications Council; a two round international Policy Delphi survey; and three scenarios depicting alternative future roles of the Pacific Telecommunications Council.

The "history" portion of the thesis was compiled by systematically going over the Pacific Telecommunications Council's existing documents and reconstructing the evolution of the organization.

The Policy Delphi monitor developed the surveys, collated the results, and reported her findings under the supervision of her academic advisor and the Director of the Pacific Telecommunications Council. The Policy Delphi study was conducted as a portion of her Master's Thesis. The purpose of a Master's Thesis is to give the Master's candidate an opportunity to conceive of, design, conduct and report on a research project. Therefore, parts of the overall study were conducted differently than if the monitor had conducted the study as a "conventional" research project. For instance, a Policy Delphi study monitor "team" usually consists of three or more persons. The monitor did not have a "team" as such but used the two persons mentioned above to check her work. Also, because of monetary considerations, the project was run on a very small budget. Her role, however, was strictly that of a monitor, having no particular "interest" in or bias toward or against the Pacific Telecommunications Council.

After completing the Policy Delphi and most of the history, the monitor was hired as PTC staff. Her role changed at this point to that of "participant observer." The scenarios had not been constructed at this time and so were written from a different point of view than if they had been written in her original role.

Description of the Pacific Telecommunications Council

The Pacific Telecommunications Council (PTC or Council) is an international, voluntary membership, non-profit organization incorporated under the laws of the State of Hawaii. It was created as a permanent forum to promote the development, understanding, and beneficial use of telecommunications in the Pacific area. It is a young organization, having filed its non-profit Charter following the second annual Pacific Telecommunications Conference in January of 1980. (Pacific Telecommunications Conferences were held prior to the creation of the Pacific Telecommunications Council.) The Pacific Telecommunications Council has enjoyed many sucesses in its first 18 months of existence.

Charter of the Pacific Telecommunications Council

A press release dated January 9, 1980 stated:

> A three day Telecommunications Conference concluded today with an announcement of the formation of a Pacific Telecommunications Council. . . . encouraged and supported by interested individuals and organizations, a steering committee has worked over the past year to create the Council. . . . It will provide a forum for an ongoing exchange of ideas and information for the betterment of the Pacific area countries through telecommunications. (PTC, Note 1)

According to the Charter which was drawn up by the creators of the PTC, the new organization was to:

A. Provide a forum for discussion and the interexchange of information, ideas, and expressions of views regarding telecommunications in the Pacific area by bringing together a multifaceted diverse body including users, planners and providers of equipment and services.

B. Promote the general awareness of the varied telecommunications requirements to meet the needs of the Pacific area.

C. Organize conferences and seminars to promote the free flow and interexchange of the varied views and requirements of the Pacifid area and to address specific telecommunications issues to assist in solving near term and future issues.

D. Communicate viewpoints and recommendations of the Council to the established nations, regional and international organizations responsible for telecommunications policy, tarrifs and standards. (PTC, Note 2)

Incorporation of the Pacific Telecommunications Council

Pacific Telecommunications Council By-Laws were drafted and approved by the Board of Trustees at a Spring, 1980, meeting. Documents were filed to become incorporated under the laws of the State of Hawaii on April 7, 1980.

Outline of the Study

Rationale for the Study

From its inception, the creators, Board of Trustees, and Executive Board of the PTC desired to see the objectives in the Pacific Telecommunications Council Charter carried out in an effort to build the Council into an organization that would deliver to the members the types of information and services that had originally attracted them. Considering several unique characteristics of the membership, this desire presented them with quite a problem. First, the Board of Trustees and the Executive Board had very high standards of excellence in terms of the image they hoped PTC would evoke and activities it would sponsor. Second, the emerging style of decision making within the Executive Board was based on "consensus." Third, the membership was geographically dispersed around the entire Pacific hemisphere and "getting together" to discuss problems and set policies would not be a simple chore.

A problem common to most new organizations or companies is money. The PTC operated on a very small budget its first year (approximately $71,000.00). Extensive Board meetings, teleconferencing, and/or computer conferencing were not only impossible budget-wise, but many members lived in locations where "electronic" hook-ups would be virtually impossible. Time was of the essence. The Pacific Telecommunications Council was legally "born" on April 7, 1980 and was already planning its first high-level activity for October of that year: A Board of Trustees meeting and International Seminar to be held in Tokyo, Japan. The leaders of the Council needed to assess the desires of the membership quickly, efficiently and thoroughly before commencing to draft the policies which would govern the organization.

Considering the characteristics of the organization, its desires and logistical problems, this Policy Delphi study was proposed to the Executive Board as an aid to fulfill the objectives of the Charter and accommodate the information needs of the policy creators, the Executive Board.

Problem Addressed

As in any newly created organization, the alternative directions it can take in its development are many. The general problem addressed in this study is: What are the alternative directions that the Pacific Telecommunications Council can take to assure that it serves its membership (consisting of government, industry, business, academic and user representatives) and carry out the objectives written in its Charter over the next ten years?

The problem then was to seek out the most appropriate method of systematically gathering the opinions of the Pacific Telecommunications Council membership, synthesizing them and finally putting them into an understandable, usable form.

On the surface the problem seems relatively simple. However, the style of decision-making and the heterogeneous nature of the Council membership as described above necessitated a careful selection of methods.

Goals of the Study

The specific goals of this study were to:

1. provide the PTC with a detailed chronological history of its pre and post incorporation development (including important documents, policy statements, and meeting summaries), and

2. provide the PTC with systematically gathered information to help the PTC explore alternative avenues of development as suggested by the Policy Delphi activity, and

3. out of the information gathered, suggest three possible alternative futures (high activity, moderate activity, and diminishing activity) of the Council in the form of scenarios.

By attaining these goals the PTC would be provided with (a) background information concerning the original intentions of its creators and its development to date, and (b) a set of suggested possible future policy directions with assurance that those suggestions would be in accord with the views of its governing body, the Board of Trustees.

Relationship between the Problem and the Methods

Several considerations are necessary when selecting an appropriate method. Because of the geographical/cultural spread of the PTC membership, a method that would reach all of the respondents in the most expedient and (because of the budgetary constraints of the project monitor) inexpensive manner had to be selected. In addition, the methods had to be fair, understandable and inoffensive. The method also had to allow all opinions to be expressed because of the "consensus" style of decision-making endorsed by the PTC leadership.

To fulfill all the goals of the study and the requirements listed above, the following methodology was chosen.

Methodology

In many respects the methodology of this thesis is a "case study." The case study consists of three (3) phases:

Phase I. First, the history/background of the Pacific Telecommunications Council is described, setting the context for the remainder of the study. The history consists of a detailed description of the PTC's origins, structure, purposes and activities. The history also explores the questions of who conceived of the Pacific Telecommunications Council, when it was first conceived, and why there was a need for such an organization. Persons who are responsible for the organization are identified and their roles are described.

A variety of materials were used to plot the history of the PTC. Public records such as press releases and articles are used as well as intraorganizational records including minutes of meetings, "white papers," policy and procedure documents and personal interviews.

Phase II. A Policy Delphi survey (the main method used in the thesis project) dealing with the future of the Council, the Pacific area and the role of PTC in the Pacific area was conducted. The results of the survey were intended to be used by the Executive Board and the Board of Trustees when considering future alternative policy directions that will shape the PTC over the next ten years. The Policy Delphi survey consisted of two (2) rounds of questions circulated by mail to each of the 34 members of the Board of Trustees. Summaries of each round were returned to the Board of Trustees members. Policy recommendations are included in the Policy Delphi Final Report. (For a flowchart of the Policy Delphi study see chapter 4.)

Phase III. The final phase involves the generation of three scenarios (the secondary methods used in the project) which describe alternative future roles of the Council. These scenarios were created from the data gathered by the Policy Delphi. The framework for the scenarios consists of three (3) possible Council roles as illustrated in Table 1.

Products of the Study

The products of the study are:

1. a chronological history/background of the Pacific Telecommunications Council,

2. the Policy Delphi survey and data, and

3. three (3) scenarios representing possible future roles for the Pacific Telecommunications Council.

Summary

This thesis project was conducted for two reasons. First, the research provided the Pacific Telecommunications Council with useful information about its history and future. Second, the overall project provided the monitor with the opportunity to conceive a research problem, design a method of dealing with the problem, conduct the research necessary to address the problem and explicitly and thoroughly report on the process.

Table 1

Scenario Matrix

Roles	Activities		
	Human	Information	Coordinating
High Activity			
Moderate Activity			
Diminishing Activity			

CHAPTER 2

HISTORY

Introduction

This chapter describes in detail the events which led up to the creation of the Pacific Telecommunications Council and the activities and projects which have been sponsored by the Council since its creation. A timeline of the Council's development has been included at the end of the chapter.

Background

The Pacific Telecommunications Council has been established as a voluntary, independent organization to meet a growing need for the development, understanding, and beneficial use of telecommunications in the Pacific area, which consists of all countries within and bordering the Pacific Ocean.

The Council provides a permanent forum for discussion and the ongoing exchange of ideas and information on telecommunications in the Pacific area. It brings together a multifaceted, diverse group of users, planners, and providers of telecommunications equipment and services. A function of the PTC is to organize exchange of the varied views and telecommunications requirements of the Pacific area and to address specific telecommunications issues, present and emerging. In addition, it communicates viewpoints and recommendations of the Council to established national, regional, and international organizations responsible for telecommunications policy.

The Council was established in January, 1980. Membership is open to all corporations, entities, institutions and individuals having an interest in telecommunications and related activities in the Pacific area.

The strength of the Council lies in the breadth and caliber of its membership. Membership growth since the Council's relatively recent inception has been gratifying and reflects a diversity of background, culture, interest, and expertise. Membership as of June 1, 1981, includes 28 "for-profit" organizations, 12 non-profit organizations, and 50 individuals originating from 16 different countries.

Original Concept of Pacific Telecommunications Conference

The first public mention of a possible Pacific Telecommunications Conference appeared when John M. Eger, representing the viewpoint of the U.S. Office of Telecommunications Policy (OTP),[1] addressed the Research Institute of Telecommunications and Economics (RITE) in Japan on September 19, 1975. In his talk, Eger briefly outlined the Ford administration's rationale for creating the OTP.

Eger pointed to the acceleration of technological advances and the inadequacy of the U.S. institutions which govern communications to progress at the same rate as two reasons why the U.S. wished to turn to international forums as a means of resolving international telecommunications problems and issues. It was suggested that attention be paid to strengthening or modifying international institutional structures to help solve the problems facing U.S. and foreign telecommunications users, developers, researchers and governing bodies. Industrialized nations could aid developing nations with advice and expertise in developing their own telecommunications potential. In this way, global telecommunications could develop at an "optimal rate of innovation." So that these things could proceed as smoothly as possible, the U.S. Office of Telecommunications Policy proposed:

---

[1] The OTP has since been eliminated. Its functions have been incorporated into the National Telecommunications and Information Administration.

> that we [the U.S. and Japan] agree to hold regular, frequent consultations on a broad range of communications issues, including such issues as cable and satellite facility planning. Sharing views on communication policy planning, cable TV, direct broadcast satellites, assistance to developing countries, and other similar matter of joint concern. (Eger, Note 3)

This proposal, perhaps, was the seed from which the Pacific Telecommunications Council has grown.

A few months later, in January of 1976, Eger, once again representing the OTP, addressed the Electronics Industries Association in Boca Raton, Florida. This speech emphasized again the gap between available telecommunications services and policies, stating that "the pace of technological change has outstripped the ability of our political institutions to deal with the socio-economic changes that such developments demand" (Eger, Note 4).

At that time several actions were being taken by the Ford administration to help close that gap:

1. The inauguration of a program of regulatory reform of unprecedented proportions.

2. The design to inject more competition into certain segments of the economy which heretofore had been heavily and unduly regulated.

3. Submission of legislation to the Congress that would deregulate certain important aspects of the air, rail, and motor carrier transportation industries.

4. OTP evaluation of draft legislation that would free cable television from a regulatory structure which limits it to a medium supplementary to television broadcasting (Eger, Note 4).

Turning to the international scene, Eger discussed strategies to prevent telecommunications policy mistakes on a global scale and pointed out the intertwining of the global economy which closely ties into the global telecommunications networks.

Finally, he reported on the meetings held in Japan and the Far East the previous fall, reviewing the OTP proposal for "a program of regular, frequent consultations on a broad range of communications issues . . . and other matters of mutual concern" (Eger, Note 4).

The OTP was making plans for a meeting of several U.S. government agencies and telecommunications business executives in early 1976. They were to discuss plans for a "Pacific Telecommunications Conference" to be held in the spring of 1977. So, by January, 1976, the notion of a "conference" addressing telecommunications issues and developments had been proposed in both Asia and in the United States.

Together with Mr. William Fishman, also of OTP, Eger officially proposed a "Pacific Telecommunications Conference" in a "White Paper" in January, 1976. Herein is a summary of that paper:

> This paper proposes the establishment of an informal Pacific Telecommunications Conference, to be held annually, in which nations

> in the Pacific Ocean Basin can meet to exchange views and information of telecommunications and to work toward harmonization of telecommunications facilities, services and policies in that region of the world. In spite of the growing sophistication of telecommunications in the area and the growing importance of the Pacific as a trade area, there is today no international forum adequate to meet the needs of the Pacific nations for regular exchanges of data and views in the telecommunications field.
>
> The Conference would be informal in nature and would be designed to encompass a wide variety of issues ranging from facilities or circuit activation discussions, such as those which have occurred in the Atlantic region, to consideration of broad social concerns such as the impact of telecommunications on individual privacy. Preparation for more formal international telecommunications meetings and conferences could also occur. Participants would include appropriate government officials, private telecommunications carriers, telecommunications equipment manufacturers, telecommunications users, scholars, and others with an interest in the subject matter. The Conference is not designed to issue directives of any kind, but rather to provide a focal point and opportunity for multilateral consideration of the many complex issues posed by the rapic technological advances in telecommunications and their critical importance to modern society.
>
> Initially it is proposed that the U.S., Japan, Canada, Australia, and Indonesia participate in organizing the Conference, additional participants would be welcomed once the Conference has established itself. (OTP, Note 5)

A meeting was called in Washington, D.C., to discuss the proposal. Consultees included representatives from several U.S. government agencies (HEW, the Departments of Commerce and State, and the FCC) and large U.S. corporations (IBM, Control Data Corporation, AT&T, etc.). Among the academic representatives invited to participate was, now PTC Director, Richard J. Barber of Hawaii, the proposed location of the conference. This is what was proposed:

> For some months, the Office of Telecommunications Policy, in concert with the Departments of State and Commerce, the Federal Communications Commission, and other U.S. agencies concerned with telecommunications, has been preparing for an informal, multilateral conference to advance international telecommunications cooperation and planning in the Pacific Region. Reaction by the public and private sectors has been favorable. Our thinking at the moment is to hold it in late Spring of 1977 in Hawaii to (a) explore social

> and economic implications of existing and new telecommunications technology for advanced and developing countries, (b) provide a forum for consultations prior to formal international conferences on radio spectrum planning and management, (c) consider elements of international telecommunications facilities in the Pacific Region and (d) discuss the applications of existing and emerging telecommunications.
>
> The conference is not intended to supplant any existing international institutions or practices, but rather to provide an opportunity for experts . . . to informally seek a common agenda for telecommunications development. Experts from the United States, Japan, Canada, Australia, and other Pacific countries will be invited. Such an opportunity is overdue given the fundamental importance of telecommunications to international commerce, trade, finance, and economic interdependence. (OTP, Note 5)

In personal conversation, Barber expressed some of his reactions to that meeting in his report back to an informal telecommunications interest group which had been meeting to consider this and other telecommunications activities. The Honolulu-based group had been asked to aid in the logistics of the conference. That group included Barber, Norman Abramson, University of Hawaii, David Horton, then employee of Hawaiian Telephone Company, and others from the University of Hawaii-Manoa and the East-West Communication Institute. Barber reported his enthusiasm in the overall idea but disappointment in the exclusion of a voice for small Pacific nations in the proposed conference.

Meanwhile, with the proposed activity one year away, a presidential election was to take place in the United States. The result was the replacement of the Ford Administration with the Carter Administration and, along with that, the change in OTP officials. This created enough problems, along with the sensitive question of "which China" to invite (the Republic of China or the People's Republic of China), to table plans for a Pacific Telecommunications Conference in 1977.

Hawaii's Revival of the Conference

In Honolulu, the group of people involved in the conference plans had neither forgotten the idea nor lost their vision for such a forum. They gathered support from the Communications Society of the Institute of Electrical and Electronics Engineers (IEEE), the Department of Planning and Economic Development - State of Hawaii, the University of Hawaii, Hawaiian Telephone Company, Hawaii Tele-communications Association, the Hawaii section of IEEE, and the Alaska Office of Telecommunications. With this support they set out to organize a conference for January of 1979. Barber and Abramson co-chaired the event. This conference was to include not only the developed nations of the United States, Canada, Japan, and Australia, but also Central and South American, Southeast Asian, and Pacific Island nations.

Pacific Telecommunications Conference, 1979[2]

Conference (PTC '79) registration totaled 315 persons from 18 countries, representing many sectors of industry, business, and academe. Nineteen sessions were held on topics ranging from economics to electronics to policy and planning during the two-day conference held January 8-9, 1979. The idea of a permanent forum grew out of the conference.

> Following the first Pacific Telecommunications Conference, PTC '79, an ad hoc post-conference meeting of forty-four conferees agreed that an effort should be made to establish a permanent organization to continue and expand on the PTC '79 activities.

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[2] For more information, see Pacific Telecommunications Conference 1979 Proceedings which is available through the Institute of Electrical and Electronics Engineers, Inc., 345 East 47th Street, New York, New York 10017.

The steering committee, which was formed by volunteers from this group, has expanded to twenty-six members, broadly representing both geographical and interest areas (PTC, Note 6).

Those 26 volunteers included:

Norman Abramson, University of Hawaii, USA

Richard J. Barber, University of Hawaii, USA

Luis Ramiro Beltran, Centro Internacional de Investigaciones para el Desarrollo, Columbia

Chris Deacon, Australian National University, Australia

John deMercado, Department of Communications, Canada

John M. Eger, Attorney at Law, USA

Gerson Echavarria, Chilean Telecommunications Administration, Chile

Robert M. Engelbardt, Hawaiian Telephone Company, USA

Robert P. Freeman, Hawaii Tele-communications Association, USA

Emanuel Fthenakis, American Satellite Corporation, USA

Joseph J. Gancie, ITT World Communications, Inc., USA

Jorge Kanahuati, Televisa, S.A., Mexico

Stuart Kingan, Cook Island Government, Cook Islands

H. Rex Lee, Public Service Satellite Consortium, USA

George J. Lissandrello, IBM World Trade Corporation, USA

Jack Lyle, East-West Communication Institute, USA

Hajime Mizuguchi, Nippon Electric Company, Japan

Phillip C. Onstad, Control Data Corporation, USA

Howard H. Pappert, AT&T Long Lines, USA

Lawrence Roberts, Telenet Communications Group, USA

Carlos A. Romero, Instituto Nacional de Investigacion y Capacitacion en Telecomunicaciones, Peru

J. P. Sheppard, South Pacific Bureau for Economic Cooperation, Fiji

Suwarso, PanSystems, Indonesia

Nozomu Takasaki, Research Institute of Telecommunications and Economics, Japan

Robert M. Walp, General Communications Inc., USA

Carver L. Washburn, Western Union Telegraph Company, USA

Steering Committee Meets

Following the January meeting, Barber worked out a draft "Pacific Telecommunications Council" charter. That draft was considered at a meeting of the Steering Committee in the fall of 1979.

> On September 27 and 28, 1979, eighteen steering committee members or their representatives met in San Diego, California, to review a draft "Pacific Telecommunications Council Charter" and to plan for the Council's creation. (PTC, Note 7)

Plans were made for the Steering Committee to meet during the PTC '80. It was agreed at the San Diego meeting that a second budget would be drafted for consideration at a meeting in January, 1980. In addition to these two items, the agenda included resolutions pertaining to (a) the process and criteria for a waiver of membership fees, (b) the ratification of the initial Board of Trustees, (c) election of the Chairman of the Board, (d) guidelines pertaining to expenditure of funds, (d) appointment of the Executive Director, and (e) general activities planned for the first year.

Pacific Telecommunications Conference, 1980[3]

PTC '80 was planned under the directorship of Barber. The conference was co-chaired by Abramson, Horton, and Jack Lyle, Director of the East-West Communication Institute. It was held January 7-9, 1980, once again in Honolulu. Total registration at PTC '80 was 425 persons from 23 countries and territories. As in PTC '79, there was a cross section of representatives from industry, government, and academia. Topics explored at the conference included satellite communications, Pacific Island telecommunications, telecommunications policy in developed countries and international concerns, computer network communications, and new telecommunications technologies.

At the closing plenary session of the second Pacific Telecommunications Conference, the chartering of the Pacific Telecommunications Council was announced. This transpired due to several actions taken by the Steering Committee, which met several times during the Conference.

Steering Committee Actions at PTC '80

The Steering Committee met during the Conference and accepted an amended Charter at the January 7th meeting. The Board of Trustees was elected by a motion which nominated Steering Committee members who were present at the San Diego meeting in September, 1979, or were present at that (January 7, 1980) meeting to automatically become a member of the

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[3] For more information, see the Pacific Telecommunications Conference 1980 Proceedings. It is available through the Pacific Telecommunications Council office, 1110 University Avenue, Suite 303, Honolulu, Hawaii 96826.

Board of Trustees of the Pacific Telecommunications Council. Those elected included:

Norman Abramson, University of Hawaii, USA
Richard J. Barber, University of Hawaii, USA
Luis Ramiro Beltran, Centro Internacional de Investigaciones para el Desarrollo, Columbia
Chris Deacon, Australian National University, Australia
John deMercado, Department of Communications, Canada
Ithiel de Sola Pool, Massachusetts Institute of Technology, USA
Gerson Echavarria, Chilean Telecommunications Administration, Chile
John M. Eger, Attorney at Law, USA
Robert M. Engelbardt, Hawaiian Telephone Company, USA
Robert Freeman, Hawaii Tele-communications Association, USA
Emanuel Fthenakis, American Satellite Corporation, USA
Joseph J. Gancie, ITT World Communications, Inc., USA
Manuel Gomez-Ortigoza, Televisa Enterprises, Mexico
Del Harmon, Western Union Telegraph, USA
David Horton, GTE Communication Network Systems, USA
Jorge Kanahuati, Televisa Enterprises, Mexico
Stuart Kingan, Cook Islands Government, Cook Islands
H. Rex Lee, Public Service Satellite Consortium, USA
George Lissandrello, IBM World Trade Americas/Far East Corporation, USA
Jack Lyle, East-West Communication Institute, USA
Hajime Mizuguchi, Nippon Electric Company, Japan
Juro Oizumi, Chiba Institute of Technology, Japan

Phillip C. Onstad, Control Data Corporation, USA

Howard H. Pappert, AT&T Long Lines, USA

Douglas E. Peterson, ITT Asia Pacific, USA

Syed Rahim, East-West Communication Institute, USA

Lawrence Roberts, Telenet Communications Group, USA

Carlos A. Romero, Instituto Nacional de Invesetigacion y Capacitacion en Telecommunicaciones, Peru

J. P. Sheppard, South Pacific Bureau for Economic Cooperation, Fiji

Suwarso, PanSystems, Indonesia

Nozomu Takasaki, Research Institute of Telecommunications and Economics, Japan

Nestor A. Virata, Philippine Long Distance Telephone Company, Philippines

Robert M. Walp, General Communications, Inc., USA

Elizabeth Young, Public Service Satellite Consortium, USA

The Executive Board members were elected by secret ballot. They were:

Chairman: Jorge Kanahuati, Televisa, S.A., Mexico

Vice Chairman of Finance and Administration: Robert Engelbardt, Hawaiian Telephone Company, USA

Vice Chairman of Program Development: Nozomu Takasaki, Research Institute of Telecommunications and Economics, Japan

Vice Chairman of External Relations: George Lissandrello, IBM World Trade Corporation, USA

Richard J. Barber was named as the Pacific Telecommunications Council Executive Director.

First Meeting of the Board

The Board of Trustees and the Executive Board met April 5-6 and 7-8, 1980, respectively, in Honolulu. Many things took place at these meetings. Three special projects were proposed: (a) a PTC-sponsored Human Resource Directory under the direction of Dan J. Wedemeyer, (b) a Survey of Entities to help define the environment in which the PTC would exist, proposed by Robert P. Freeman, and (c) Information Classification and Dissemination, a strategy to be developed to help communicate information gathered by the Council through such projects as mentioned above. A "Pacific Telecommunications Council Operational Plan" defining the operations of the Board of Trustees, Executive Board, Council Administration, PTC Committees and Special Projects was also presented by Freeman.

During these meetings, it was unanimously approved to incorporate the Council as a non-profit corporation under the laws of the State of Hawaii. A Council budget and a membership fee schedule were discussed. Several changes in the Council By-Laws were suggested, discussed, and adopted.

Plans for PTC '81 were explored but only to a limited extent due to the absence of key conference organizers. It was decided that Council members should treat the conference as an opportunity to promote the Council and were encouraged to avail themselves to potential members.

First Year's Activities

From the moment of incorporation, the PTC began to function as an "open forum" with three proposed research projects: the Human Resource

Survey, Survey of Other Entities, and Information Classification and Dissemination.

Human Resource Survey. Realizing the great potential embodied in the members of the PTC and the entire Pacific area population, a Survey of Human Resources was proposed. The purpose was to (a) systematically develop a data base of telecommunications professionals in the Pacific area, and (b) through an electronic based Directory classifying talents and interests, reach an ultimate goal of linking people with one another to help solve telecommunications problems. According to Wedemeyer, project director, "it is intended to facilitate wider personal contact and information exchange among professionals working in the communication field" (PTC, Note 8). Data to be gathered would depend on one's willingness to share personal information. It was proposed that eventually the Directory would become self-supporting through subscriptions.

This project was first proposed at the April 5-6, 1980, Board of Trustees meeting by Wedemeyer of Communication Associates. At that time Nozomu Takasaki, Chairman of Program Development, led a discussion on funding the project. After discussing the proposal, the Board of Trustees agreed that having the information electronically available--perhaps via a word processor--was preferred over a printed directory. During the April 7-8 Executive Board meeting, Takasaki suggested that while the (U.S.) National Science Foundation and the Japan Society for Promotion of Science often jointly fund similar projects, the proposed Human Resource Survey budget was too modest to justify application to that or any similar fund. It was agreed that the Council would fund the project as the (Council) budget warranted it. Approval for moving ahead on the project would require Executive Board approval. This postponed the start of the project for a few months. The proposal was also to be modified to insure input from the South Pacific Island and Southeast Asian nations.

During the July 8-10, 1980, Executive Board meeting, the Executive Board asked Barber to consult with Wedemeyer to prepare for the production and mailing of questionnaires. An update report was submitted to the Executive Board at their September 28-28 meeting in Tokyo. It was agreed that Phase I (the initial data gathering and data entry on a word processor) of the Human Resource Survey project should commence immediately. Initially 1250 persons would be surveyed (all PTC '79 and PTC '80 participants plus a list of persons submitted by Takasaki). This decision was announced to the Board of Trustees at the October 1-2, 1980, meeting which was held in Tokyo.

By mid-March, 1981, more than 400 professionals had been profiled and by the end of March a second round of surveys had been sent to 400-500 referred professionals. Weekly updates began June 1, 1981.

Entity Survey. Another Pacific Telecommunications Council project initially proposed to the Board was a "Survey of Other Entities." According to the PTC Operational Plan:

> In order to better establish the position of the Council in relation to other organizations with an interest in telecommunications, the Council proposes to survey various common interest groups, official institutions, educational institutions, and other like bodies. Items of specific interest include such things as their charters, objectives, membership, fees, inter-dependencies with similar groups and modes of communication with the public. An analysis of this detail, it is hoped, will not only provide the Council with a

> better understanding of its function, but also with a clearer grasp of the means for fulfilling that function. (PTC, Note 9)

Although the Entity Survey was introduced at the April, 1980, Board of Trustees meeting, a proposal for its operation was not submitted. During June, 1980, a listing of regional organization reflecting an interest in telecommunications in the Pacific area was compiled by Carol Santiago, a PTC office assistant. The list was presented at the July Executive Board meeting and served as a basis for the Entity Survey.

Barber reported at the October Board meeting that Kenneth Jones, who was then on sabbatical from San Diego State University and was being provided with space at the East-West Communication Institute, had offered his assistance to the Council through January 31, 1981. He would be helping with the preliminary stages of the Entity Survey. In November, 1980, requests for information in connection with the project were sent to each PTC member. A few responses were received.

In February, 1981, the Entity Survey listing was updated and circulated among the Executive Board members and key Council members who represent specific geographic areas of the Pacific for their additional input and corrections. Those "key" persons included Chris Deacon, Australia; Julio Polloni, South America; Nestor Virata, Southeast Asia; J. P. Sheppard, South Pacific Islands; and Sei Kagayama, Asia. The listing included the names of 150 organizations and entities involved in communications and which appeared to have an interest in the Pacific area. Complimentary PTC '80 Proceedings were sent to 64 organizations on the list from mid-March to mid-April, 1981. Individual letters were sent to each organization on the list in early May introducing PTC, explaining the purpose of the contact, and asking for specific types of information about their organization in return. Plans are currently underway to classify and store the information.

Information Classification and Dissemination. One objective of the PTC stated in the Charter reads, in part, to "provide a forum for discussion and the interexchange of information" (PTC, Note 2). The third specific project initially proposed by the Council appears to be in line with fulfilling that objective. This project, Information Classification and Dissemination, would develop a means of synthesizing and communicating information gathered in Council-sponsored projects (such as the Human Resource Survey and the Entity Survey). By developing this project, the value and usefulness of the gathered information would be assured.

In a report made by Takasaki at the October Board meeting, those present were informed that this project was still in its conceptual stage. At this same time, Takasaki proposed the formation of a "Research, Studies and Seminars Committee." This committee would assist in long-range research projects.

In March, 1981, Takasaki met with Syed Rahim of the East-West Communiation Institute, Wedemeyer of the Department of Communication, University of Hawaii, and Baber to examine some preliminary steps and uses of the information Classification and Dissemination project. No firm actions have been taken to begin the project.

PTC newsletters. A Newsletter Proposal was drafted in June, 1980. The objectives were:

1. to facilitate the interexchange of information concerning telecommunications activities, issues, and concerns in the Pacific area,

2. to inform readership of Council activities,
3. to communicate viewpoints of the Council, and
4. to develop a sense of community among Council members.

The newsletter would be published quarterly and circulated to Council members, prospective Council members, selected media, individuals, organizations, and government agencies involved in telecommunications in the Pacific area. Contents would include reports on Council activities, update reports on Council projects, profiles of Council members as well as special features on telecommunication developments in the Pacific area. The Council Director would serve as Editor. The proposal calls for a March, June, September, December publication schedule. However, the first issue was published in August, 1980. Two other issues have been published since the first: in December, 1980, and in March, 1981. The December issues received wide distribution at PTC '81. By March, the format had been fairly well set. Future issues will hold to the proposed schedule.

Tokyo seminar. A highly successful seminar was held in Japan on October 2, 1980, following the Board of Trustees meeting October 1-2. Featured speakers were Saburo Okita, Japan's former Minister of Foreign Affairs and now the Japanese government representative of External Economic Relations, who gave a talk entitled, "How to Proceed with International Cooperation in the Pacific," and Ithiel de Sola Pool, Professor of Political Science, Massachusetts Institute of Technology, who spoke on "The Future Role of Telecommunications in the Pacific." Kiyomi Yukihiro, President of Japan's Research Institute of Telecommunications and Economics (RITE), welcomed the seminar participants and distinguished guests, including the General Director of Telecommunications Policy of Japan, Morizumi; Deputy Minister of Post and Telecommunications, Hiroshi Asao; Director of International Affairs, Telecommunications Policy Bureau, Ministry of Post and Telecommunications, M. S. Horiguchi; Director of Electronics Policy Division, Ministry of International Trade and Industry, E. Sakuta; and the Mexican Ambassador to Japan, Francisco Javier Alejo. (PTC, Note 10)

Pacific Telecommunications Conference, 1981[4]

The third annual Pacific Telecommunications Conference was held in January 12-14, 1981, in Honolulu, Hawaii. Twenty-six countries and territories and six European countries were represented by a total of 372 participants. Keynote speakers included Roger P. Vallo of GTE Communications Network Systems, USA; Frank Y. C. Yung of Singapore Telecommunications Authority, Singapore; and Kiyomi Yukihiro of the Research Institute of Telecommunications and Economics, Japan. Their addresses emphasized the diversity of need and telecommunication development in the broad Pacific area. Panel discussions focused on telecommunication needs in the Pacific islands with the PEACESAT system being utilized to bring in discussants from several island locations. The use of telecommunications for ocean surveillance was explored in another panel. Other panels and paper presentations included:

1. Telecommunications Demand/Rate/Regulation Issues.
2. Public Service and Educational Uses of Telecommunications.

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[4] For more information, see the Pacific Telecommunications Conference 1981 Proceedings, which is available from the Pacific Telecommunications Council office, 1110 University Avenue, Suite 303, Honolulu, Hawaii 96826.

3. Communication Networks Design and Development. ITU Deputy Secretary General Richard Butler and ITU South Pacific Regional Project Manager Graham Davey spoke on "Communication Policy Issues and the ITU Role in the Pacific."

January 1981 Meetings

The Pacific Telecommunications Council Board of Trustees and Assembly met just prior to the opening of PTC '81 in Honolulu to review the organization's first year's activities and to act on several issues concerning the future of PTC. Two separate meetings were held.

The 1980 PTC Board of Trustees met January 11, 1981. As directed at the October Board meeting in Tokyo, the Executive Board met in Mexico, November 24-26, 1980, to clarify some matters before the Board would meet again in January. Among those things which needed clarification was the By-Laws of the Council. There was also a need to draw up a plan for the composition of future Boards of Trustees and a plan to move smoothly into the composition. These things were accomplished by the Executive Board in the time between the October and January meetings and drafted for the Board's consideration at the January meeting. Revised By-Laws were approved by the Board. A proposed Composition Policy and proposed Transition Plan were approved by the Board for presentation to the Assembly for their consideration. Both policies were approved by the Assembly.

By-Laws. The By-Laws were reorganized to clarify specific points and procedures. The new draft was revised by a Honolulu attorney to assure their correctness. This was the first step to remove any inconsistencies between the By-Laws, Charter, and Operational Plan.

Composition policy. This policy calls for eventual geographical and membership-type balance on the Board of Trustees. It is based on five principles:

1. Although interests from many countries are represented by the PTC membership, Board members should represent and originate in the Pacific hemisphere.
2. To be effective, the PTC Board members should have representation from the less developed and less populated parts of the Pacific.
3. No "type" of member--individuals, non-profit, or for-profit--should dominate the Board.
4. The policy should be flexible enough to accommodate the growth of the relatively new Council.
5. The policy should be understandable and easy to implement. (PTC, Note 11)

The Board then should consist of 46 members: 22 for-profit, 15 non-profit, and 9 individuals. The geographical areas to be represented within this group of 46 are North America (Canada, USA), Central America (Mexico, Central American countries), South America, East-Northeast Asia (Japan, China, Korea, USSR, Hong Kong, etc.), Southeast Asia (Singapore, Malaysia, Indonesia, Philippines, Thailand, Vietnam, etc.), and Oceania (Australia, New Zealand, Papua New Guinea, Melanesia, Polynesia, Micronesia, etc.).

This plan was set forth:

For-profit	9	from the Americas (3 for each area)
	9	from Asia (3 for each area)
	3	from Oceania
	21	Subtotal
	1	from Hawaii
	22	Total

Non-profit	6	from the Americas (2 for each area)
	6	from Asia (2 for each area)
	2	from Oceania
	14	Subtotal
	1	from Hawaii
	15	Total
Individual	9	at large from all areas
BOARD TOTAL	46	

All PTC members have voting rights to elect the Board. Since Honolulu is the PTC office location, the provision for one for-profit and one non-profit Board member was made to provide ongoing support to the Honolulu office. This policy will be put into operation in January, 1982, when members in each category will be elected for one, two, and three-year terms. In subsequent years, one-third of the Board will be elected.

Transition plan. In order to accomplish the above-mentioned Board composition, certain things were required of the (to be elected) 1981 Board of Trustees: First, it had to be viable and generally representative of the membership, and second, it had to number 46, including entities and individuals. In other words, the 1981 PTC Board of Trustees was to be the "transition" Board into the future boards which will fill the requirements of the Composition Policy.

As of January, 1981, there were 32 entities (for-profit and non-profit) on the PTC membership roll and 19 individuals. In order to elect a 1981 Board of 46 members, the following criteria were set:

> All Council members who represented entities located in the areas of Asia, Americas and Oceania as of December, 1980, were to

> automatically become members of the 1981 Board of Trustees. (Any such member had the right to decline without prejudice a seat on the Board.)
>
> All individual Council Board members meeting certain requirements were to automatically become members of the 1981 Board if they so wished. (PTC, Note 12)

Requirements included (a) past attendance of at least one Board meeting, and (b) willingness to pay the membership fee. Certain exception would be made (some entity seats would be filled by individuals) for the 1981 Board to accommodate the "transition." As of January, 1981, 19 individual members qualified to become Board members. Since 32 entities plus 19 individuals equal 51, some adjustments had to be made to create a 46-member Board of Trustees.

Both policies were approved by the Assembly, and the 1981 Board of Trustees was elected. The new Board met January 14, 1981. It was moved and unanimously approved by the 1981 Board to re-elect for two-year terms the 1980 Executive Board. The officers elected for terms running from January, 1981 to January, 1983, were:

Jorge Kanahuata, President

Robert Engelbardt, Vice President of Conference/Finance

Nozomu Takasaki, Vice President of Research, Studies and Seminars

George Lissandrello, Vice President of External Relations

Conference Committee

In the January meetings it was decided that a Conference Standing Committee (according to the specification of a "Standing Committee" in the Operational Plan) should be created to guide future PTC-sponsored conferences. The primary objective of the committee is to assure conference quality, the conference's relevance to interest of PTC members and others, and the fiscal soundness of the meetings. The Conference Committee met for the first time May 2-3, 1981, in Honolulu to plan for the 1982 Pacific Telecommunications Conference.

Future Plans

As of June 1, 1981, plans are underway for a Board of Trustees meeting to be held June 4-5 at the State Department in Washington, D.C. Topics to be discussed by the Board include the two major projects to help define the Pacific telecommunications environment. An issues study and the development of an environmental facilities data base have been proposed. Plans for PTC '82 will also be discussed.

The Board meeting is to be accompanied by a high-level seminar similar in stature to the seminar held in Tokyo in October, 1980. Government representatives from Japan, Mexico, and the U.S. are on the agenda to address the seminar participants along with two high-ranking corporate representatives from Japan and the U.S. and a United States Congressman. Approximately 600 persons involved in telecommunications including government representatives, business executives, scholars, and telecommunications users from the Pacific hemisphere have been invited to attend the seminar.

September 19, 1975

John M. Eger, Acting Director of the U.S. Office of Telecommunications Policy addressed the Research Institute of Telecommunications and Economics, Japan.

January 15, 1976

John M. Eger addressed the Electronics Industries Association Board of Governers in Boca Raton, Florida.

Late January, 1976

John M. Eger and William Fishman propose in a "White Paper" a "Pacific Telecommunications Conference."

Late Spring, 1976

A meeting is called in Washington, D.C. to discuss the proposal.

Plans proceed for the firs Pacific Telecommunications Conference to take place in Spring, 1977.

Spring 1977 Conference plans are tabled.

Hawaii Committee revives the Conference idea. Sets dates for January, 1979.

January 8-9, 1979

PIC '79, Honolulu, Hawaii. Pacific Telecommunications Council Steering Committee formed.

PIC '80 plans being made.

September 27-28, 1979

PIC Steering Committee met in San Diego, California.

January 7-9, 1980

PIC '80, Honolulu, Hawaii.

PIC Steering Committee met during PIC '80, announcing the formation of the Pacific Telecommunications Council at the closing session.

The Pacific Telecommunications Council Board of Trustees and Executive Board were elected at the first PIC Board Meeting and By-laws were adopted. Richard J. Barber was named as the Council Director.

April 5-6, 1980

Second meeting of the PIC Board of Trustees, Honolulu, Hawaii.

Three research projects were proposed. The PIC Operational plan was presented. The PIC filed for Incorporation under the laws of the State of Hawaii.

April 7-8, 1980

First meeting of the PIC Executive Board, Honolulu, Hawaii. PIC '81 plans discussed in detail.

PIC '81 plans being made.

July 8, 1980

Second meeting of the PIC Executive Board, Honolulu, Hawaii.

Plans discussed and made for an October Board meeting in Tokyo, Japan. Human Resource Directory project reviewed. Composition of the Board discussed.

August, 1980

First PIC Newsletter published.

September 28-29, 1980

Third meeting of the PIC Executive Board, Tokyo, Japan.

Composition of the Board worked out. Plans for the Board of Trustees finalized (Transition Plan).

October 1-2, 1980

Third meeting of the PIC Board of Trustees, Tokyo, Japan.

Human Resource Directory okayed for commencement. "Research, Studies and Seminars Committee" proposed. Executive Board's recommendations considered (Composition Policy and Transition Plan).

October 2, 1980

First International PIC Seminar, Tokyo, Japan

November 24-26,1980

Fourth meeting of the PIC Executive Board, Mexico City, Mexico.

Plans for PIC '81 finalized. Recommendations to the Board on By-laws, Composition Policy and Transition Plan finalized.

January 11, 1981

Third meeting of the PIC Board of Trustees, Honolulu, Hawaii.

Voted to recommend the proposed revisions in the By-laws, the Composition Policy and Transition Plan to the Assembly.

First meeting of the PIC Assembly.

Voted to accept the proposed changes in the By-laws, the Composition Policy and the

January 12-14, 1981

PIC '81, Honolulu, Hawaii.

January 14,1981

Fourth meeting of the PIC Board of Trustees, Honolulu, Hawaii, (newly appointed Board).

Executive Board for 1981-1983 elected.

March 21-22, 1981

Fifth meeting of the PIC Executive Board, Honolulu, Hawaii.

PIC '82 discussed in detail. Plans made for the PIC Conference Committee to meet in May made. Plans for the Second International PIC Seminar to be held in Washington, D.C. discussed.

May 2-3, 1981

The Conference Committee met in Honolulu, Hawaii to plan for PIC '82.

Figure 1. History timeline.

CHAPTER 3

METHODOLOGY:

POLICY DELPHI AND SCENARIO

Description of the Problem

As described in the previous chapter, the Pacific Telecommunications Council is a unique organization in many ways. The Council is intended to service a wide range of interests within the telecommunications field, has a heterogeneous membership and is rapidly expanding in membership, services and activities. This thesis addresses the question "what are the alternative directions that the Pacific Telecommunications Council can take to assure that it best serves its membership (consisting of government, industry, business, academic and user representatives) and carry out the objectives of its Charter over the next ten years?"

A closer examination of this problem exposes two features. First, it is future oriented: We are looking for a method to systematically survey the opinions of the Pacific Telecommunications Council members on possible policy alternatives which could guide the Council's future development and organize them in a clear useful manner. Second, the problem is policy-oriented: We are looking for a method to provide information which will assist in policy formation. Therefore, we must view the problem from the proper perspective and select an appropriate method of inquiry.

Approach

Today we are experiencing the emergence of many new sciences. Traditionally they were divided into the physical and social sciences. Physical sciences have been called the "hard" or "exact" sciences while the social sciences have been classified as the "soft" and "inexact" sciences.

> We speak of an exact science if [the] reasoning process is formalized in the sense that the terms used are exactly defined and reasoning takes place by formal logico-mathematical derivations of the hypothesis (the statement of the fact to be explained or predicted) from the evidence (the body of knowledge accepted by virtue of being highly confirmed by observation). That an exact science frequently uses mathematical notation and concerns itself about attributes which lend themselves to exact measurement, we regard as incidental rather than defining characteristics. The same point applies to the precision, or exactness, of the predictions of which the science may be capable. While precise predictions are indeed to be preferred to vague ones, a discipline which provides predictions of a less precise character, but makes them correctly and in a systematic and reasoned way, must be classified as a science.
>
> In an inexact science, conversely, reasoning is informal; in particular, some of the terminology may, without actually impeding communication, exhibit some inherent vagueness, and reasoning may at least in part rely on references to intuitively perceive facts or implications. Again, an inexact science rarely uses mathematical notation or employs attributes capable of exact measurement, and as a rule does not make its prediction with great precision and exactitude. (Helmer and Rescher, 1959, pp. 25-26)

In this study the problem we are dealing with falls under the umbrella of the inexact sciences (and in possibly into the emerging communication policy science). We are seeking a spectrum of opinions and opinions are not measureable in exact terms. Further, the opinions we are gathering regard the future of the Pacific Telecommunications Council. They are not verifiable in any strict scientific sense. Given this, an appropriate method is the Policy Delphi, a future oriented,policy guiding technique which assists in reducing uncertainty and examining the problem stated above.

The Inexact Sciences

The division between the exact and the inexact sciences has traditionally presented the false assumption that because the social sciences fall mainly into the second category they are inferior, second class sciences.

As researchers, we gain knowledge by making inquiries in a number of ways. In order for the knowledge we gain through research to be considered scientific, the method of inquiry "must have as its purpose the explanation and prediction of phenomena within its subject-matter domain and it must provide such explanation and prediction in a reasoned, and therefore intersubjective, fashion" (Helmer and Rescher, 1959, p. 25). In their landmark article, "On the Epistomology of the Inexact Sciences" (1959), Olaf Helmer and Nicholas Rescher set out, in part, to show that this "grading" of the exact and inexact sciences is inaccurate and false. They point out that exactness is an attribute of only a few subfields of physics and that when we move from the very precise inner core of the exact sciences to real-life applications such as architecture and medicine, they become more dependent on informal, subjective reasoning. Citing the fields of economics and psychology, Helmer and Rescher went on to point out that some fields depend on both exact derivations and intuitive judgement and hence there is and cannot be a clear distinction between exact and inexact sciences. Further, inexactness is not only an attribute of the social sciences.

Helmer and Rescher show that there is a fundamental difference in the epistomological principles between the social and natural/physical sciences. Objectivity, that is, "the intersubjectivity of findings independent of any one persons' intuitive judgement" (Helmer in Boucher, 1977, p. 244), is the criterion which sets science apart from intuitive guesswork. This distinction is of prime importance in this study and the standard to which the social sciences must conform. The problem addressed in this thesis must be subjected to rigorous standards, yet by necessity requires a softer, more qualitative method.

Laws and Quasi-laws

Laws in the social sciences are "well-confirmed" statements contingent upon certain restrictive conditions which set a precedent (i.e., they are law-like) yet they are loose in that exception to the laws are acceptable. The law-like characteristic of social science laws makes these well-confirmed statements more than descriptive summaries: they can serve as a foundation for explanation as well as provide "counter-factual force." Because of the underlying conditions of social science laws and their application to other cases in other contexts, social science laws "may only be indicated in a general way and are not necessarily (indeed in most cases cannot be expected to be) exhaustively articulated" (Helmer and Rescher, 1959, p. 28). Therefore, another characteristic of the laws of social science is "looseness." This should not be interpreted as or be synonymous with sloppiness or carelessness.

Since social science laws allow exceptions they are considered "quasi" or general. These laws are called quasi-laws and can be considered valid even if exceptions occur so long as these exceptions can be explained. Helmer and Rescher conclude that

> if we consider the situation, not from the standpoint of the wishful dreamer of neat and tidy theory construction, but from that of the pragmatist in pursuit of a better understanding of the world through reasoned methods of explanation and prediction, then we have good reason to take heart at the sight even of quasi-laws, and we should realize that the seemingly thin line between vagueness and vacuity is solid enough to distinguish fact from fiction reasonably well in practical applications. (p. 30)

Yet what we want to do is establish a clear understanding of the difference in the epistimological bases of the exact and inexact sciences. To do so helps to establish the credibility of future oriented research methods which are dependent upon intuitive judgment and create "opinion data" (specifically the Policy Delphi method). The existence of quasi-laws in the social sciences does not permit us to make a clear distinction, because quasi-laws also exist within the applied physical sciences. Here it is useful to examine the role of laws and quasi-laws in explanation and prediction to establish this difference.

Explanation and Prediction

Explanation. Scientific explanation consists of a statement based on accepted general laws, supporting evidence and a logically derived conclusion. Some explanations are based on universal laws while others are based on statistical laws. The conclusions based on universal laws can be quite certain while conclusions based on statistical laws are uncertain. We have been talking about quasi-laws in the context of the inexact sciences. Because of the "loose" characteristic of these laws, the conclusions which can be derived from them are also uncertain but for a different reason. "A statistical law asserts the presence of some characteristic in a certain (presumably high) percentage of cases, whereas a quasi-law asserts it in all cases for which an exceptional status (in some ill-defined but clearly understood sense) cannot be claimed" (Helmer and Rescher, 1959, p. 31). Yet the design of an explanation (the logical derivation) is the same for both types of non-universal laws (quasi- and statistical) as well as for universal laws.

Prediction. There is a strong similarity between prediction and explanation in terms of logical derivation. The major difference is that the hypothesis of a prediction and the hypothesis of an explanation concern the future and the past, respectively. However there are several other important differences which must be explored.

Predictions come in two classes. Unreasoned predictions exist and are acceptable so long as they are based on the good track record of either the predictor or the method of prediction. These types of predictions do not have a parallel in explanation. Explanations must establish conclusions that uphold the fact to be explained rather than any other suggested alternative. Conclusions of a reasoned prediction need only to be found stronger than other possible alternatives.

> Here then is an important distinction in logical strength between explanations and predictions: An explanation, though it need not logically rule out alternatives altogether, must beyond reasonable doubt establish its hypothesis as more credible than any comparable alternative. (Helmer and Rescher, 1959, p. 32)

In this study the primary problem is concerned with the future of an organization and the policy alternatives which will guide it over the next ten years. If we can accept the notion of prediction, then it is reasonable and appropriate to select a future and policy oriented method to examine the problem as stated.

Selecting a Method

A problem which is currently being examined in the emerging communication policy science is the inappropriate use of traditional social science methods to examine non-social science problems. L. S. Harms (1980) pointed out in his article, "Appropriate Methods for Communication Policy Science: Some Preliminary Considerations," that discipline science extracts is problems from within the discipline. Policy science, on the other hand, draws its problems from real world situations. This difference calls for new methods of inquiry which are "interactive and participatory" (p. 6).

It is necessary to select a method which will effectively deal with the problem stated in this study. Further, it is necessary to recognize that the method must fit the requirements of a future and policy oriented problem. That method is Policy Delphi.

Evidence and Expertise in Prediction

The most common type of evidence used in inexact science is that which is obtained through experiments which involve probability. There are three concepts in probability which are important to understand: relative frequency (the number of times X is true in a given population), degree of confirmation (the logical relationship between two statements), and personal probability (the amount of confidence one puts in a given hypothesis). The first two concepts are objective in nature. The third type, personal probability, is subjective.

When dealing with future, policy oriented research questions we are primarily concerned with subjective probability.

In a Delphi study, personal probability supplies all the evidence upon which future alternative states are projected. The persons supplying the probabilistic evidence is always an "expert" in his/her field. An expert is one who has a large amount of background knowledge in the topic under question, and a good track record of making accurate predictions when compared to the average non-expert. These characteristics of an "expert" become very important when making predictions in the exact sciences because

> the informed expert, with his resources of background knowledge and his cultivated sense of the relevance and bearing of generalities in particular cases, is best able to carry out the application of quasi-laws necessary for reasoned prediction in this field. (Helmer and Rescher, 1959, p. 38)

So, in most cases, the foundation of futures research methods lies in the appropriate and selective use of expert judgment as evidence in making reasoned predictions about future states.

Justification of the Use of Expert Judgement

If we are willing to allow reasoned predictions, that is subjective judgements, as evidence in the inexact sciences (specifically in futures research), what has become of the objectivity which has been stressed as the most important ingredient in science? Objectivity can be maintained if the researcher considers the experts to be instruments with which to measure reality.

We have already established that the inexact sciences use informal reasoning and rely on intuitively perceived evidence. Further, future oriented research is predictive rather than explanatory in nature. Olaf Helmer (1977) has pointed out in his article, "An Agenda for Futures Research" that "futures research is prescientific in nature" (p. 245).

Often a decision which serves to guide the future is necessary immediately and there is no time to construct the perfect theory and model upon which to base the decision. Such is often the case in policy decision situations. "For policy purposes . . . useful though partial results at the time a decision must be made are better than those that produce more complete but unusable results after a decision has been made" (Harms, 1980, p. 7).

In these cases, intuitive expert judgements are necessary

> (1) to supply judgemental data about the future, based on their intuitive, though often theoretically unstructured, insights into real-world phenomena; (2) to construct ad hoc models or to judge the suitability of existing models; (3) to apply their expertise as role players in simulation games; and additionally, they are often required (4) to use their imagination and inventiveness to design the instrumentalities and long-range strategies that result in appropriate action programs for dealing with the problems of the future. (Helmer, July, 1977)

Selecting Experts

The term "expert" obviously implies that one has a great deal of background knowledge in a given field. However, this does not always mean that he/she can perform well as a judge of future conditions. The expert must also have an established record of reliability compared to the average non-expert having some background knowledge in the expert's field of specialization. In futures research, one must be particularly careful to use this criteria for selecting the experts who will supply the opinion data.

When selecting experts to supply predictions about future states the researcher must also consider the multifaceted nature of most situations and select experts from many fields to insure that the problem under consideration is viewed from several perspectives. The group we are studying is a multifaceted group of experts in various aspects of the telecommunications field. The emerging style of decision-making within the leadership of the gruop is that of consensus. With these two thoughts in mind it seems appropriate to select a method which encompasses these characteristics and uses them to the best advantage.

Using Expert Judgment in Futures Research

The intent of futures research and hence the use of expert judgment is not to predict the future. Rather the intent is to identify present and future trends, events and major "branch points" in order to describe or bracket the future. The information and alternatives which are gathered through futures research should be taken into account when making policies and decisions for the future. In his article, "A Policy Sciences View of Future Studies" (1970), Yehezkel Dror said, "the main mission of futures studies should be to contribute to the improvement of policy making" (p. 3). One of the goals of this study is to "provide the PTC with systematically gathered information to help the PTC explore alternative avenues of development." Therefore a futures research method, the Policy Delphi, has been selected as a means to obtain this goal.

Consensus as an Application of Expert Judgment

As mentioned above, expert judgment is used in a number of instances including gathering opinion data, participating in simulation and gaming techniques and creating/evaluating models.

The committee process is a familiar way to arrive at concensus. "The committee approach brings people together across organizational lines in order that all views at similar organizational levels in the whole organization may be represented, and a meaningful view arrived at after the differing interests have been adequately expressed and advocated" (Turoff in Linstone and Turoff, 1975, p. 85). However, committees that are representative in nature are often too large and their tasks too time consuming to be effective. Committees also tend to suffer from problems such as the "band-wagon" effect, specious persuasion, unwillingness to abandon an opinion once it is publicly expressed, dominance by one member of the committee, fear of expressing an unpopular opinion and other psychological factors. Yet committee responses to problems of policy and decision-making are more reliable than the sole opinion of one expert.

The conventional Delphi technique is one method for reaching consensus. This method solicits the judgements of many experts (on a given subject) and "pools" them to produce a solitary judgement on that subject. Because of its unusual features, it produces a committee response while avoiding the pitfalls of a committee which meets face-to-face. It employs the use of several rounds of questions which are answered anonymously by the "committee members." An outgrowth of this method, the Policy Delphi, is the major method used in this thesis and "can be utilized to revive the effectiveness of the committee approach" (Turoff, 1970, p. 153). The Policy Delphi uses the committee structure to obtain opinions which can aid in policy development and decision making.

One of the goals of this study was to provide the PTC with systematically gathered information to help the PTC explore alternative avenues of development. The Policy Delphi method was selected to obtain this goal because its unique characteristics best fit the nature of the problem. The Policy Delphi is described in detail in the following section.

The Policy Delphi

The Policy Delphi method is an outgrowth of the conventional Delphi method. The Policy Delphi "seeks to generate the strongest possible opposing views on the potential resolutions of a major policy issue" (Turoff in Linstone and Turoff, 1975, p. 84). The parent method, Delphi, grew out of defense research. It was developed in the late 1950's by the research team of Olaf Helmer and Norman Delkey at the Rand Corporation "for scientific and technological forecasting" (Congressional Research Service, 1976, p. 303). The purpose of the conventional Delphi is "to obtain the most reliable consensus of opinion of a group of experts" (Linstone and Turoff, 1975, p. 10). Though opposite in purpose (e.g., a Delphi study may seek a consensus on when event X may occur while a Policy Delphi study will seek several different alternatives to solving a policy question), the two methods hold much in common.

The conventional Delphi's first non-defense application appeared in 1964 study by T. Gordon and Olaf Helmer, "Report on a Long-Range Forecasting Study." The study was conducted to assess "the direction of long-range trends, with special emphasis on science and technology, and their probable effects on our society and our world" (Turoff in Linstone and Turoff, 1975, p. 10). Since then the conventional method has been applied to administrative planning, budget estimation, education and institution development, and the exploration of personal values and social goals, etc. Most often, however, it has been used in a forecasting mode.

The Policy Delphi was developed by Murray Turoff, a Professor of Political Science at New Jersey Institute of Technology. This method goes beyond the forecasting and consensus generating mode of the conventional Delphi method to be used as a communication system for addressing diverse and complex policy questions.

Definition

The Policy Delphi focuses on questions and issues which affect policy creation or change. "A policy question is one for which there are no experts, only advocates and referees" (Turoff, 1970, p. 150). The Policy Delphi (as with the conventional Delphi) "may be characterized [and is hereby defined] as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem" (Linstone and Turoff, 1975, p. 3). The Policy Delphi method uses this communication process to obtain diverse viewpoints on complex policy questions, thus allowing policy makers to arrive at decisions after examining many possible alternatives.

Uses

The Policy Delphi does not stand alone as a "perfect," "whole" way of arriving at policy decisions. However, it is appropriate to use the Policy Delphi as a supplement to other, concurrent policy development activities, and as a guide for policy formulation.

Procedures

In a Policy Delphi study the monitor poses policy questions and invites response from a selected group of experts on the general topic area. Multiple, sequential rounds of questions are employed. The previous round's synthesized results are distributed with the next generation of questions. The questionnaire is mailed or private interviews are held by the project monitor. In preparing a Policy Delphi study, the following steps should be taken to insure a well-executed study:

1. Identify and describe users and uses of the Policy Delphi results.
2. Select topics of issues for study.
3. Recruit qualified participants for the Policy Delphi study.
4. Prepare and mail Round One Questionnaire.
5. Analyze Round One returns, and prepare and mail Final Round.
6. Analyze Final Round returns and prepare final report.

(Dodge et al., 1975, pp. 217-218; Schneider, 1972, pp. 428-494)

Chapter 4 will show how these steps were followed in the Pacific Telecommunications Council Policy Delphi study.

Strengths and Cautions

In a Policy Delphi survey, all questions are answered in private by each of the participants. This approach eliminates the need for the group of participants to be geographically bound. This also assures the "anonymity" of individuals' responses (vs. identification of respondent to response in a group context), thus freeing the participants to take unusual or unpopular stands on given questions. Individuals can express themselves frankly and need not feel embarrassed or hesitant if they wish to change their positions on a given question later in the First Round or in subsequent rounds of questions. As mentioned earlier in this chapter, the anonymous approach to answering questions alleviates many of the psychological factors present in face-to-face "committee" contexts.

Policy Delphi results are understandable to those who have participated in the study as well as to "outsiders." The format is easy to follow, depending upon the way the project monitor has chosen to set up the reports. An outsider who has some understanding of the topic under study can gain information from the results of the study by reading a given question and then reading the synthesis of responses. The internal portion of the study (compilation of results) which is conducted by the monitor is less understandable to the participant and outsiders, but is not necessary for them to understand.

Along with the many positive features of the Policy Delphi, there are a number of problems to consider. "Individual" responses eliminate the benefits of spontaneous thoughts or brainstorms which often occur in face-to-face communication. The project monitor has full control over the survey feedback and potentially could skew the results by being biased or simply by being "sloppy." Since a Policy Delphi can be very time consuming, the drop-out rate between the first and final rounds can be devistating. In order to alleviate this problem somewhat it is wise to offer incentive or compensation for completing the study. Finally, as in other research methods there is the danger of treating the Policy Delphi as a panacea. Policy makers must be wary of believing they have used the "best method" with the "best experts" and therefore must have the "most accurate" basis from which to make their decisions.

Problem/Method Link

The problem being addressed in this study, "what are the alternative directions that the Pacific Telecommunications Council can take to assure that it serves its membership . . . and carry out the objectives written in its Charter over the next ten years," is imbedded in a unique context. The Council's membership is multifaceted and geographically, culturally and politically dispersed over the Pacific hemisphere. The Council operates on a very small budget. The Council is currently developing policies and procedures to guide its future. Decisions and policies based on group consensus is the emerging style within the Executive Board of the organization. These are the features that characterize the PTC. The Policy Delphi is effective when studying groups such as the PTC Board of Trustees which are geographically dispersed because the method is cost efficient, it does not require that all the members of the group be present to gather their various opinions, and it allows each member of the group to respond anonymously to questions, thus providing the policy makers with a wide spectrum of opinions on serious policy matters. The Pacific Telecommunications Council is currently developing policies: The Policy Delphi is intended to be used as a guide for and in conjunction with other policy creation activities. The Policy Delphi does not build consensus on policy questions but does gather a wide spectrum of opinions. This feature will provide the decision makers with much input when developing policies. Therefore, since the characteristics of the Policy Delphi method and the features of the problem complement one another, it seems reasonable and appropriate to choose this method to examine the problem in this study.

Scenario

Policy Delphi results can be used as a link or "data-base" for exploring alternative futures through creating scenarios. Scenarios are a holistic approach of forecasting and are most useful when developed in conjunction with expert opinion methods such as Delphi and Policy Delphi. The scenario can be used as an alternative or auxiliary means of expressing research results from expert opinion type surveys.

One of the goals of this study was to suggest three alternative futures of the Council in the form of scenarios. This secondary method used in this study is discussed briefly in this section.

History

The first person to use scenarios as a means for planning was probably Herman Kahn while he was working as a researcher at the Rand Corporation. Scenarios became a popular means of looking ahead in the 1960's. However, the scenario as a literary form--actually meaning the outline of a scene in a play--dates back many centuries "to the days of Sir Thomas More (1478-1535)" (Dodge et al., 1975, p. 195), and have appeared in the past century in the form of popular science fiction.

Definition

In The Year 2000, Herman Kahn (1967) called the scenario "an hypothetical sequence of events constructed for the purpose of focusing attention on causal processes and decision points." In the planning mode, a scenario is a projection of possible future realities woven into a "future history."

Uses

Scenarios are used for many purposes. Scenarios have been used to entertain and to satisfy innate human curiosity about the future. A general use of the scenario is to look at and provoke thoughts about the future when it is difficult to conceive of due to rapid change.

For the purpose of planning, scenarios are used to create frameworks for developing plans, to clarify issues so that planners can take steps to move toward preferred futures and to look at complex planning problems holistically. They are often used to substitute narrow judgements and forecasts about the future with integrated, broad views of the future.

Scenarios are often used in conjunction with other forecasting methods by business, government, and social planners.

Procedures

When preparing a scenario, certain steps must be taken. Informally, a recommended prescription is a good dose of imagination and a sense of how parts fit together to form a whole system. More formally, these steps should be followed:

1. Create a matrix from which to work by selecting interacting variables. (For example, consider the technical, social, economic, and political impacts on telecommunication, transportation and trade.)

2. Decide upon a range of scenarios (e.g., utopian, steady-state, and collapse views of the future.)

3. Gather data to substantiate the scenarios. This may be done by polling experts in your subject area through the Delphi or other futures research method.

4. Brainstorm for possible trends and events that would affect the scenarios.

5. Write the scenarios by "weaving" the interacting variables together to form a believable future given those variables and range of alternatives.

Strengths and Cautions

Scenarios that are believable and internally consistent can provoke much thought toward possible, alternative futures. They can also bring potential "buried" problems to the fore, put large amounts of information into perspective for planners and allow for several views of the future to be considered since a range of possibilities is covered. A well-written scenario will provide a plausible account of a range of possible futures and will provide "contingency" plans for alternative futures for planners.

While scenarios are a creative way of looking at possible alternative future states, they do have some drawbacks. Although they are data based, data are only as reliable as those persons who created it. Further, scenarios are only one person's interpretation of the data. Integrating the variables is a difficult task. Care must be taken to represent possible trends and events fairly and believably. Planners must always be aware their scenarios are imagined futures, not real futures. They must avoid regarding them as truth.

Problem/Method Link

The problem being dealt with in this study asks about alternative directions. Scenarios suggest alternative future states by plotting trends and events and weaving them into a possible future. The creation of scenarios as a part of this study will allow the PTC Board of Trustees to consider possible policies to develop and directions to take if they prefer a future similar to or different from the suggestions made in the scenarios for the organization.

Summary

The Policy Delphi and Scenario writing are both "inexact," "soft," "qualitative" future/policy research methods which rely upon expert opinions for their outcomes. They are complementary methods which are appropriate when attempting to draw conclusions and reduce uncertainty about the future and make decisions and develop policies to plan for the future. They are appropriate for the problem addressed by this study and help to fulfill the goals of this study.

CHAPTER 4

THE POLICY DELPHI STUDY

Introduction

This chapter traces the steps of the Pacific Telecommunications Council Policy Delphi Study. A flow chart of the process is located at the end of this chapter.

This study was proposed to the Pacific Telecommunciations Council Executive Board when they met in Honolulu April 7-8, 1980. The study was approved and was to be conducted under the authority of Richard Barber, Council Director. It was agreed that all surveys and letters associated with the study would be mailed to the Board of Trustees with his approval and signature.

The Process

Identify and Describe Users and Uses of the Study

Users. The users of the Policy Delphi Study, as signified in the proposal, were to be the Pacific Telecommunications Council Board of Trustees, its Executive Board and Director.

The Board of Trustees was a group made up of 34 individuals with a variety of backgrounds (see list in chapter 2). Each member of the Board was involved in some aspect of telecommunications in the Pacific area. Twenty were from the U.S. (twelve from profit-making corporations, three from non-profit organizations, and five academics.) Five were from Latin America (two from profit-making corporations, one from government telecommunications authorities, and one from a non-profit organization). Three were from Japan (one from a profit-making corporation, and two academics). Two were from the Pacific Islands (both government representatives). Two were from Southeast Asia (both from profit-making corporations). One was from Canada (a government telecommunications authority representative), and one was from Australia (also a government telecommunications authority representative). All but one of these respondents were male. They were experts in technical and engineering, business and economics, and social and policy aspects of Pacific telecommunications. Often they crossed over these lines. (The response results are shown for each of the Policy Delphi rounds further on in this chapter.)

The Executive Board is the policy making body of the PTC. They planned to gather periodically throughout the year to create policy options, rules and procedures for the Board of Trustees' ratification. This group was made up of four individuals. Each held important roles within their own corporations and could devote only a fraction of their time to PTC activities. Gathering for two or three days perhaps every three to four months would not be sufficient if they were to develop any policy recommendations for the Board of Trustees to consider. They needed information on how the Board of Trustees felt on certain topics before they sat down to develop policies. They would be able to use the Policy Delphi results in this way.

The Pacific Telecommunications Council Director would be called upon from time to time to make recommendations to the Executive Board in the creation of given policies, and in this way would be able to use the Policy Delphi results

Uses. The results of the study were to be used to facilitate and guide future policy decisions which, in turn, were to guide future projects and undertakings of the PTC. One of the stated goals in the project proposal was: "To provide the Pacific Telecommunications Council with systematically gathered information indicating three possible alternative futures (high activity, moderate activity, and diminishing activity) of the Council." This goal is acted upon by the execution of the Policy Delphi study.

Select Topics or Issues for Study

In selecting the topics and issues to be included in the Policy Delphi questionnaire, several sources were examined:

1. The objectives of the Council as stated in its Charter. (See chapter 2.)

2. The Pacific Telecommunications Council By-Laws.

3. The Pacific Telecommunications Council Operational Plan.

These documents left many critical questions open for discussion, such as (a) balance in membership, (b) Pacific Telecommunications Conference logistics, (c) definition of the Pacific area (for membership application evaluation purposes), (d) Pacific-wide telecommunications problems and issues to be addressed by the Council in the future, and (e) future plans for organizing intraorganizational as well as interorganizational communications and projects.

Recruit Qualified Participants for Policy Delphi Survey

The Policy Delphi monitor considered using the entire Pacific Telecommunications Council membership as survey subjects in the planning stages of this study. However, due to several reasons, the Board of Trustees was selected as the survey group. This particular group was chosen for four reasons: First, the Board of Trustees consisted of a number of experts in the field of telecommunications. They were also the creators and therefore the only "experts" on the Pacific Telecommunications Council. Second, the size of the group was suitable for an international Policy Delphi which was to be conducted by mail. This number of respondents would provide opinions from a wide spectrum of interests. A larger group would possibly have been too large to try to manage, especially in terms of manually collating the results. Third, the Board of Trustees had more direct input into the functions of the Council than the Assembly of members. This being so, it was assumed that they would be willing to accept certain responsibilities, including responding to surveys such as this, which were sent out from the Honolulu office. From a practical standpoint then, there was a strong likelihood of response from the Board members as they (hopefully) would feel a stronger obligation to participate in Council activity. Fourth, the group was "representative" of the Pacific Telecommunications Council membership at the time they study began.

Prepare, Pretest, and Mail Round One Questionnaire

With the topics and issues for study selected, the next step was to prepare questions for the First Round of questions. After formulating several questions--often the same questions asked different ways--the project monitor circulated the questions to her two supervisors for their consideration. Together they selected the questions to include in the First Round Questionnaire.

The questions asked in this Policy Delphi study were different from questions asked in other Policy Delphi studies (Schneider, 1972, p. 485; Turoff, 1972, pp. 164-167). The Policy Delphi, as created by Murray Turoff, suggested possible policies and asked respondents to vote on the possible policies on a variety of scales (Turoff, 1970, p. 164-167; Turoff in Linstone and Turoff, eds., 1975, pp. 90-92). The Questions asked in the Pacific Telecommunications Council Policy Delphi study were open ended and asked the respondents to give their opinions on a variety of topics. This was done because of the nature of the Council--very new and operating in a consensus mode of decision-making. The intent of the study was not to "prescribe" policies for the Board Member's approval but rather to seek their opinions to aid in informed policy creation activities. For example, one question asked:

1. In regard to the PTC Conferences:

   What time of year should the conferences be held?

   How many days should they be?

   How often should they be held?

   Should the location rotate or continue to be in Honolulu?

   Should they remain "broadly" focused or should a more restrictive theme be developed for each conference?

   What role should suppliers and vendors be given at the conferences?

   In what way would you suggest Pacific Telecommunications Council keep informed of pertinent developments or research findings in addition to or instead of PTC Conferences?

The next step was to pretest the questionnaire by giving it to selected University of Hawaii and East-West Communication Institute faculty members, and the PTC Director and Chairman of the Board. A few changes were suggested and after the changes were made, the First Round of questions was mailed July 30, 1980. (See Appendix A).

Responses began to come in to the Pacific Telecommunications Council office by the end of August, 1980. Six weeks after the First Round was mailed, a follow-up reminder was sent to Board Members by telex who had not returned their surveys. The problems of time-lag due to the use of international mail (approximately two weeks from Honolulu to any foreign address, and the same amount of time for returns) became a more severe problem than originally anticipated. In all, 23 of 34 (67%) First Round surveys were returned.

Analyze Round One Returns

During the last week of September, 1980, the Policy Delphi monitor collated and analyzed the results of the First Round. Each survey was photocopied. Then the questions were cut and sorted into "piles." The questions were then taken one by one and examined for content. In the judgement of the monitor, the most opposite opinions were placed in separate "piles" and the other opinions were arranged in piles toward the center in relation to the most opposite opinions. This completed the collation of the answers.

In terms of analysis, the monitor synthesized the total spectrum of opinions on a given question by writing, for example: "most respondents felt," or "one respondent said . . . while a small minority expressed the general feeling of the vast majority by saying." The monitor used some direct quotes as examples of majority opinion and took care to point out the most opposite reactions to a given question. In cases where the respondents had been asked to list ideas or issues, the monitor listed the ideas.

A preliminary report of the First Round results was compiled and presented to the Executive Board which met in conjunction with the Board of Trustees meeting held in Tokyo, October 1-2, 1980. (Only 50% of the surveys had been returned when the report was written. The 67% response mentioned above was taken into consideration when creating the Second Round survey.)

As an example, the report was written in the following format:

1. In regard to the PTC Conferences: A general feeling of satisfaction is reflected by the Board of Trustees in regard to current policy concerning PTC Conferences, to be continued in the future.

   What time of year should the Conference be held?

   A majority of respondents consider the winter months, preferably January, as the best time of the year for conferences to occur. A few members gave consideration to "off-season" and summer months to accommodate "vacation" times for persons in the academic field.

   How many days should they be?

   Again, there is an overall feeling that a three-day agenda is satisfactory, with a few members opting for a slightly shorter/longer time span for the conference.

   How often should they be held?

   Most respondents were in agreement that policy providing an annual conference is desirable. There is the slightest suggestion that a conference on an every-other-year basis might attract more people. Also, it was suggested that "special topics" conference/seminars be held on an ad hoc basis throughout the year.

Should the location rotate or continue to be in Honolulu?

A major difference in opinions appeared over this question. A majority of the respondents would like to see the conferences held in locations other than Honolulu on a rotating basis. Suggestions included San Francisco, Los Angeles, and other places in the Pacific area.

Should they remain "broadly" focused or should a more restrictive theme be developed for each conference?

The overwhelming opinion of the Board was to leave the conferences with a broad focus of topics. There was only the slightest desire expressed for specific themes to be assigned to conferences, or at least not to be ruled out.

What role should suppliers and vendors be given at the conferences?

Policy opinions concerning the role of vendors at the conferences ranged from displayer/exhibitor/demonstrators to financial supporters, participants in panel discussions, hosts of events, and informants on the "status of telecommunication research and development in the Pacific."

In what way would you suggest Pacific Telecommunications Council keep informed of pertinent developments or research findings in addition to or instead of PTC Conferences?

Policy leaning toward an eventual electronic information service for "keeping in touch" purposes is suggested. A "newsletter" for the near future is recommended. Practical suggestions included participation in related conferences, seminars, and reading professional journals.

(For further details, see Appendix B.)

It was requested that only the Executive Board review the First Round Preliminary Report to preserve the integrity of the study. (Ideally, the entire Policy Delphi activity should take place without subjects discussing the questions among themselves.) It was anticipated that more surveys would be returned after the Board meeting. Several questionnaires were brought back to Honolulu by the Council Director from the Board meeting in Tokyo. Those responses were incorporated into the First Round results which appear on the Final Round questionnaire.

The following is a geographic breakdown of the respondents in the Policy Delphi study. It shows the total number of Board of Trustees members from each geographical subdivision of the Pacific area and the number of that total who returned their questionnaire.

Table 2

Policy Delphi Responses

Members	Board Members	First Round Responses	Final Round Responses
U.S.	20	11	7
Japan	3	3	3
Pacific Islands	2	2	2
Southeast Asia	2	1	2
Latin America	5	3	1
Canada	1	1	0
Australia	1	0	1
Total	34	21* (67%)	16** (45%)

*Twenty-three responses were received. This total shows only 21 because two of the responses were anonymous.

**Nineteen responses were received. This total shows only 16 because three of the responses were anonymous.

The 1980 Board of Trustees were all required to become individual members of the Pacific Telecommunications Council (as opposed to representatives of for-profit or non-profit entities). Ideally this means that they represented their own interests and not the interests of their affiliations. The individual Board Members and their affiliations are listed in chapter 2.

Prepare, Pretest, and Mail Final Round Questionnaire

The Final Round questionnaire was developed after 67% (23 of 34) of the First Round responses were received. Most of the information in the First Round Preliminary Report remained the same (that is the additional responses returned did not change the overall analysis a great deal), but was more concisely stated. The format was simple to follow: First Round question, Results Summary, Follow-on question. (See Appendix C.) The Follow-on questions were drawn out of the First Round responses. In many cases, a very logical "next step" question came out of the synthesized responses. In other cases, the Follow-on question asked the respondents to react to the positions which emerged. In a few instances no question was necessary, but respondents were invited to comment further. For example:

> FIRST ROUND QUESTION:
>
> In regard to the PTC Conference:
>
> RESULTS SUMMARY:
>
> A general feeling of satisfaction was indicated by the Pacific Telecommunications Council Board of Trustees in regard to current PTC Conference policy, and a continuation of the same annual Conference seems in order. However, a major difference of opinion appeared over Conference location. There was an even split between respondents wishing to see the Conference remain in Honolulu and those who prefer to see the location rotate. Statements justifying both positions were for practical reasons. The existence of "adequate [conference] facilities" was the argument of one respondent in favor of keeping Honolulu as the Conference location. Those supporting

> a rotating schedule were of the opinion that varying the Conference location would "help create" interest among the participants and host country" [in the Pacific].
>
> FOLLOW-ON QUESTION:
>
> Please react to these positions. You may wish to support either side or you may wish to express an entirely different notion.

The Final Round was not pre-tested as such, but was circulated among the monitor's Thesis Committee members and the PTC Director for their approval.

The Final Round of questions was mailed November 7, 1980. In order to alleviate some of the time-lag problem experienced in the First Round, a follow-memo was sent to Trustees two weeks later, November 21, 1980, who had not yet returned their surveys. Nineteen surveys, approximately 56%, were returned in all. Only 45% (16 of 34) had been returned at the time the Final Round Preliminary Report was prepared. (See Appendix D.)

Analyze Final Round Results

The results of the Final Round were analyzed in the last weeks of December, 1980 and the first weeks of January, 1981. The monitor again photocopied, cut and collated the responses according to their relationship to the most opposite answers. As in Round One, all answers were given equal weight in synthesizing and reporting on each question.

The Final Round Preliminary Report was distributed at the January 20, 1981 meeting of the Board of Trustees. Board members who had indicated that their responses were forthcoming were not in attendance at this meeting, so their responses were not in danger of bias due to reading the report before they responded to the questions individually. Their responses were incorporated into the final Policy Delphi Report. (See chapter 5.) Again, the format was easy to follow: Final Round question, Results Summary, Follow-on question, Follow-on Results Summary. For example:

FIRST ROUND QUESTION:

In regard to the PTC Conferences:

RESULTS SUMMARY:

A general feeling of satisfaction was indicated by the Pacific Telecommunications Council Board of Trustees in regard to current PTC Conference policy, and a continuation of the same annual Conference seems in order. However, a major difference of opinion appeared over conference location. There was an even split between respondents wishing to see the conference remain in Honolulu and those who prefer to see the location rotate. Statements justifying both positions were for practical reasons. The existence of "adequate [conference] facilities" was the argument of one respondent in favor of keeping Honolulu as the conference location. Those supporting a rotating schedule were of the opinion that varying the conference location would "help create interest among the participants and host country" [in the Pacific].

FOLLOW-ON QUESTION:

Please react to these positions. You may wish to support either side or you may wish to express an entirely different notion.

FOLLOW-ON SUMMARY:

The greatest number of responses concerning the conference site preferred a rotating schedule (e.g., Honolulu - 1981, Sydney - 1982, Honolulu - 1983, Suva - 1984, etc.). Most of these respondents justified their positions stating that Honolulu is not the only city in the Pacific area with adequate conference facilities. Other locations named were Tokyo, Auckland, Suva, Sydney, Raratonga, Tahiti, and Samoa. Despite this, many of them also pointed out that there would be definite organizational problems in other locations. (With adequate planning it was felt that these problems could be overcome.) On the other hand, Honolulu has the benefit of the Pacific Telecommunications Council permanent staff and additional support from the University of Hawaii, the East-West Center, and Hawaiian Telephone Company, making it the preferred location of many other respondents. Central location and good transportation were other reasons for maintaining Honolulu as the permanent conference site. Others stated that Honolulu was preferable for the next several years, and after the PTC has its "feet on the ground," a rotating conference schedule could be considered. An alternate solution to the problem was suggested by a few respondents: They suggested that Honolulu be the annual conference location and that 1-2 day seminars with specific themes be held in conjunction with Board meetings throughout the Pacific region.

The number of respondents from each geographical subdivision of the Pacific area is shown in Table 2.

Prepare Final Report

The Final Report consists of a synthesis of the two rounds of questions followed by a possible policy recommendation when applicable. For example:

> ### Synthesis of Results
>
> A general feeling of satisfaction was indicated by the Pacific Telecommunications Council Board of Trustees in regard to current PTC Conference policy, and a continuation of the same annual conference seems in order. January is the preferred month, although summertime should be considered to accommodate "vacation times" for those in the academic field. Three days is acceptable, especially if additional seminars and symposiums are held on various topics throughout the year.
>
> A major difference of opinion appeared over the conference location. There was an even split between respondents wishing to see the conference remain in Honolulu and those who prefer to see the location rotate. Statements justifying both positions were for practical reasons: The existence of "adequate [conference] facilities" was the argument of one respondent in favor of keeping Honolulu as the conference location. Those supporting a rotating schedule were of the opinion that varying the location would "help create interest among the participants and host country" [in the Pacific]. The Final Round question asked for elaboration on these positions and for a commitment to either a rotating or fixed location. The greatest number of responses concerning the conference site preferred a rotating schedule (e.g., Honolulu - 1981, Sydney - 1982, Honolulu -1983, Suva - 1984, etc.). An alternative solution to the problem was suggested by a few respondents: They suggested that Honolulu be the annual conference location and that 1-2 day seminars with specific themes be held in conjunction with Board meetings throughout the Pacific area.
>
> Board members desired to see a continuing broad focus of conference theme. Only a few wished to see "assigned themes" become part of conference organization. Opinion on the role of exhibitors ranged from financial supporters to participants in panel discussions to informants on "the status of telecommunications in the Pacific." Board members suggested participation in other related seminars and conferences as well as keeping up with professional journals as a means of staying informed of important telecommunications research and development.

Possible Policy Recommendation

Conference policy should remain as it is for the next several (3-4) years. As the Council matures, alternative locations should be considered for the annual Pacific Telecommunications Conferences. Seminars held in other parts of the Pacific could be used as experiments to test conference facilities.

Summary

This Policy Delphi was proposed in April, 1980. The First Round was mailed in July, 1980 and the Final Round in November. The respondents were members of the Pacific Telecommunications Council Board of Trustees, an international group of individuals with expertise in various aspects of the field of telecommunication. The monitor was primarily responsible for developing the questionnaires, collating, and reporting on the results. The Policy Delphi Final Report was distributed to the Board of Trustees at the June, 1981 Board meeting in Washington, D.C. This concluded the Policy Delphi portion of the thesis. The Final Report is found in the following chapter.

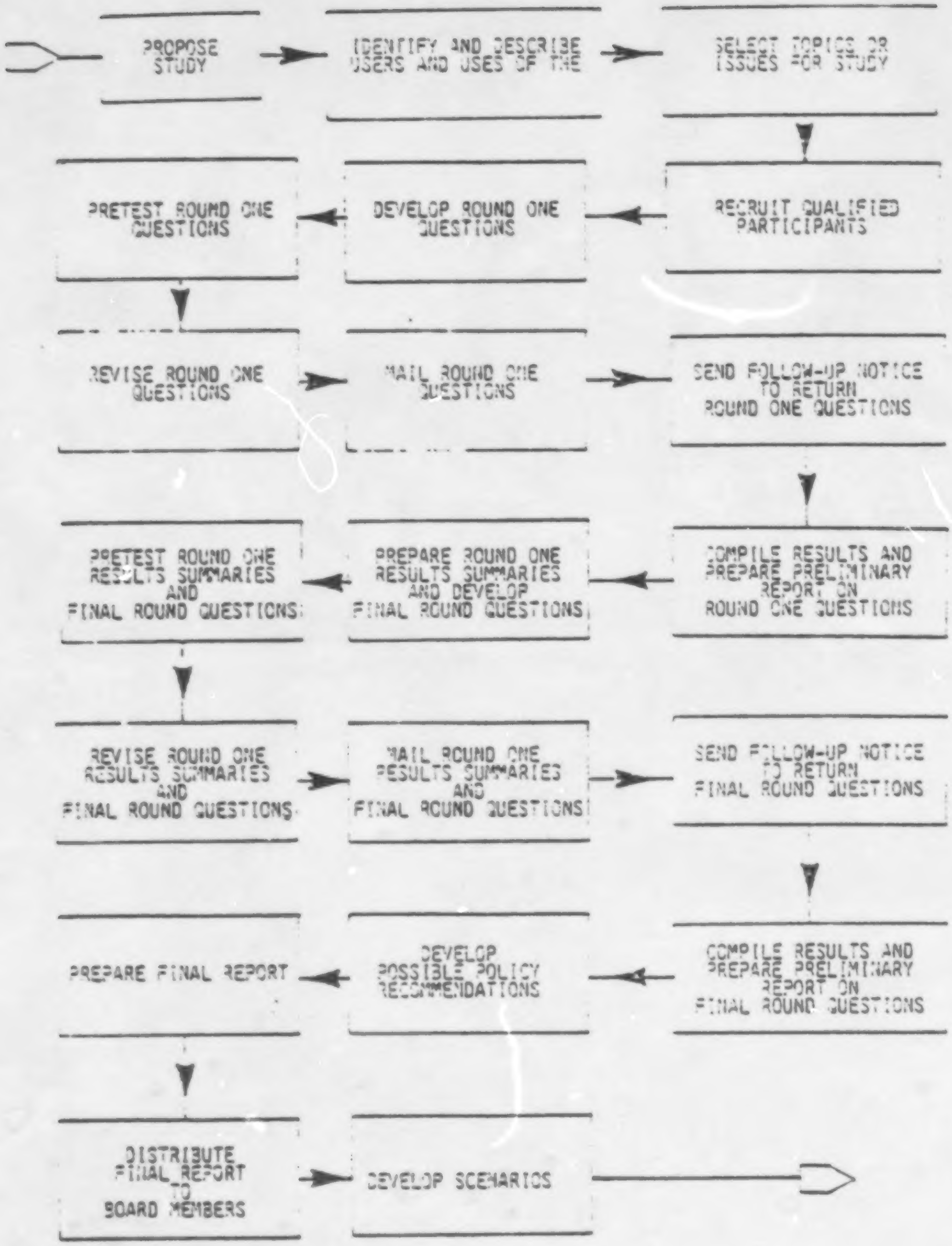
PROPOSE STUDY
IDENTIFY AND DESCRIBE USERS AND USES OF THE
SELECT TOPICS OR ISSUES FOR STUDY
RECRUIT QUALIFIED PARTICIPANTS
DEVELOP ROUND ONE QUESTIONS
PRETEST ROUND ONE QUESTIONS
REVISE ROUND ONE QUESTIONS
MAIL ROUND ONE QUESTIONS
SEND FOLLOW-UP NOTICE TO RETURN ROUND ONE QUESTIONS
COMPILE RESULTS AND PREPARE PRELIMINARY REPORT ON ROUND ONE QUESTIONS
PREPARE ROUND ONE RESULTS SUMMARIES AND DEVELOP FINAL ROUND QUESTIONS
PRETEST ROUND ONE RESULTS SUMMARIES AND FINAL ROUND QUESTIONS
REVISE ROUND ONE RESULTS SUMMARIES AND FINAL ROUND QUESTIONS
MAIL ROUND ONE RESULTS SUMMARIES AND FINAL ROUND QUESTIONS
SEND FOLLOW-UP NOTICE TO RETURN FINAL ROUND QUESTIONS
COMPILE RESULTS AND PREPARE PRELIMINARY REPORT ON FINAL ROUND QUESTIONS
DEVELOP POSSIBLE POLICY RECOMMENDATIONS
PREPARE FINAL REPORT
DISTRIBUTE FINAL REPORT TO BOARD MEMBERS
DEVELOP SCENARIOS

Figure 2. Flow chart of the Policy Delphi process.

CHAPTER 5

POLICY DELPHI FINAL RESULTS AND SCENARIOS

This chapter contains two parts: The Pacific Telecommunications Council Policy Delphi Final Report and three scenarios describing possible future roles of the Council.

The "final report" is a synopsis of the two rounds by the Policy Delphi activity. Each of the two questions on the survey are reviewed including first round results, follow-on question, and follow-on results. When appropriate, possible policy recommendations are made.

The three scenarios describe (a) a highly active Council, (b) a moderately active Council, and (c) a Council of diminishing activity. To a large extent they are based upon the desires and warnings expressed in the Policy Delphi results. A detailed matrix of the scenarios is found at the beginning of the scenario section of this chapter. It was developed by dividing the Council activities into three categories: Human, information, and coordinating. Respectively, the three categories describe the Council member's activities, the types of information services the Council provides, and the types of activities the Council coordinates for/with its members and other interested entities. These three types of activities were then set into three alternative future roles of the Council as listed above. Three is not a "magic" number here. Three scenarios were chosen because extreme ends of a continuum and a "moderate" alternative could all be represented. These "activities" were selected because the PTC is an activity oriented organization and many of the questions asked in the Policy Delphi (from which the scenarios are derived in part) involved future Council activities.

Pacific Telecommunications Council
Policy Delphi Final Report

This report summarizes the results of the two-round Policy Delphi Activity conducted from July-December, 1980, among the Board of Trustees Members of the Pacific Telecommunications Council. Possible policy recommendations for the future follow each section of the report when appropriate.

Pacific Telecommunications Conferences

A general feeling of satisfaction was indicated by the respondents in regard to PTC Conference policy, and a continuation of the same seems in order.

A major difference of opinion appeared, however, over Conference location. Approximately 50% of the respondents wish to see the Conference stay in Honolulu. The remaining 50% prefer to see the location vary throughout the Pacific hemisphere on a rotating basis. Statements justifying both positions were for practical reasons: The need for "adequate [conference] facilities" was the argument of one respondent in favor of keeping Honolulu as the permanent conference location. Those supporting a rotating schedule emphasized that varying the location would "help create interest among the participants and host country" (in the Pacific).

Possible policy recommendations. Since the question of location is likely to surface from time to time as the Council and Conference mature, for the near-term, seminars should be held in other parts of the Pacific area (than Honolulu). These seminars could be used as "tests" for potential future PTC Conference sites. Otherwise, the conferences should be organized on a par with previous conferences.

Pacific Telecommunications Council Membership

The respondents expressed a variety of concerns regarding Pacific Telecommunications Council membership policy. The "balance" of entities appeared to be of highest concern.

Two positions appeared in the First Round of the activity: those in favor and those opposed to a formal membership policy. This question was explored more thoroughly in the Final Round.

It was suggested that if membership policies were to be formulated, it should be done by a Membership Committee.

Four types of potential imbalance were cited: (a) domination by some entities, (b) lack of membership from non-corporate sectors, (c) disproportionately small representation of members from developing areas of the Pacific hemisphere and Central and South America, and (d) overloads from types of services or geographical locations.

In the Final Round, two-thirds of the respondents felt that a policy which insures a balance of members on the Board of Trustees is logical and preferable:

> Composition of [the] Council will be continually changing as evidenced in the first year. Therefore . . . emphasis should be on the Board of Trustees composition which should reflect the varied views of areas, industry, users, government and academic.

Others suggested that membership balance is "self-correcting" and "if the organization is perceived to have benefit, the 'right' members will join." This statement reflects a minority view which believes no membership policy is needed.

Possible policy recommendation. Since the completion of this activity, a "Composition Policy" which dictates the make-up of the Board of Trustees, and which contains points brought out in this activity has been drawn up and approved by the Board of Trustees. Therefore, no recommendation will be made at this time.

Defining the Pacific Area

Several definitions of the Pacific area came out of this activity. One that reflected the majority view stated: "The Pacific area comprises the Pacific Ocean and the countries within or adjacent to its contiguous seas." In a broader definition, "the wide world" was suggested. This statement addresses the reality that some European nations have interests in the Pacific area.

The Final Round question identified four categories and asked for a commitment to one or more of the definitions: (a) geographical area, (b) function, (c) open or general, and (d) other. Final Round responses indicated that a geographic definition should be the primary criterion, but that "function or interest should be considered in evaluating membership applications which do not fit the geographical constraints" (such as France--French Polynesia, and the United Kingdom--Pacific Commonwealth). Other responses preferred an open or general definition. One respondent said, "There seems to be little danger from a prospective member who does not have an 'interest' in the Pacific."

Possible policy recommendations. If the PTC desires to adopt a working definition of the "Pacific area" or "Pacific hemisphere" to be used as an aid in evaluating membership applications, etc., the definition should include geographic boundaries plus consideration of function and/or interest of non-Pacific located entities/individuals.

PTC Funding

In the First Round it was suggested that the PTC focus on obtaining grants from "neutral" foundations which do not put conditions on the use of the monies. Also suggested was that additional funding come from PTC Conference attendance by non-members, fees for PTC sponsored seminars, sale of publications, conference income/exhibitor fees and consultation fees.

In the Final Round, suggestions as to the most desirable of the ideas listed above were sought. Some very important concerns which could guide policy were brought forth. In particular, it was emphasized that funding whould be in accordance with PTC sanctioned projects. One respondent said that presently, annual membership fees, exhibitor fees from the annual conferences, conference fees and publication sales produce enough revenues "to finance an operating budget according to the activities that the Council carries out." In other words, additional funds beyond those mentioned above should be sought for specifically proposed activities.

Funding from "neutral" foundations, or at least the clarification of the neutral use of the funds derived from "large [profit/non-profit] organizations" was suggested in the Final Round. One response pointed out that funding (from "neutral" foundations) would be inappropriate "for such an industrial-applied organization" (as PTC). Another suggested that "with tax-exempt status PTC might try to obtain funds from donors who need a tax write-off."

Possible policy recommendations. A fee schedule for conference attendance should include higher fees for non-members. Revenues generated in one year should not exceed planned-for expenditures. If monies are received as donations from profit-making corporations, their unbiased use must be insured.

Services to Members

Information oriented services were most commonly suggested including newsletters, Board Meeting Minutes, Membership Directories and specific projects such as the Human Resource Directory.

In the Final Round an overriding theme appeared: An information exchange system should be a future goal of the Pacific Telecommunications Council. Some suggested that a newsletter which contains information on relevant topics would be sufficient. Others wished to see a more extended service in which the PTC holds a "coordinating role for various international research and survey activities," and would provide a "synthesized digest that [would] enable members to be broadly aware of developments across the total spectrum [of Pacific telecommunications], allowing the reader to obtain an overview." An "ultimate" goal suggested by one respondent was an "efficient data base/data communications system (informational), the development of which is based upon PTC Member cooperation in all areas of design and implementation." This question ties into the next.

Types of Information Members Should Receive from the PTC Office

Two major policy issues emerged in the First Round: (a) important information concerning the Council should appear in newsletter form on a quarterly or bi-monthly basis, and (b) information distributed by the PTC should not be limited to internal PTC affairs.

In the Final Round it was suggested that a publication policy be developed that would "give direction and be consistent with the activities of the PTC," including types of publications, information content and timing.

Possible policy recommendations. (a) Newsletters, Board Meeting Minutes, and a (membership) PTC Contact List are currently distributed to members through the PTC Office. Information on how to access the PTC Human Resource Directory will be available in the near future. These items satisfy the requests reported under "Services to Members." Therefore, no policy recommendations will be made concerning those items at this time. (b) If the Council continues to expand its activities, establishing itself as an information "clearinghouse," groundwork should be laid and materials gathered that can eventually be transferred to an accessible electronic communication system.

Languages of Publications

Most respondents in the First Round felt that printing publications in English is sufficient. However, a noticeable minority felt that major publications and publications intended for specific geographic areas (i.e., seminar announcements) should be available in Japanese and Spanish as well. Some felt that for the immediate future or until funds are available for translating, most publications should remain in English. This was an issue identified as important for future discussion

It was suggested in the Final Round that Council Members in each member country identify liasons who could be recruited to do the translating voluntarily. In cases where a Council Member was not available in a particular language, the job could be contracted out to a non-member on a fee basis.

Possible policy recommendations. Newsletters, By-Laws and the Membership Application form are being published in English, Japanese and Spanish. Other publications should be made available in the three languages at the Executive Board's discretion.

Key Purposes of the Council Over the Next Ten Years

In the First Round, respondents were asked to identify key purposes of the PTC, and in the Final Round they were asked to elaborate on them. Herein is the list and additional comments:

1. The PTC should provide an "active forum" for the exchange of ideas.

2. The PTC should coordinate and cooperate with other related international organizations on projects.

3. The PTC should provide information on services or an exchange point for developing nations and other special interest groups.

4. The PTC should "foster awareness" of and promote telecommunications technological changes, uses and alternatives, especially in respect to developing areas of the Pacific (i.e., "the development of a regional satellite communication system" and "the development of

natural resources using satellites").

5. The PTC should hold conferences, sub-conferences, seminars and lectures (on specific topics).

6. The PTC should "disseminate research findings," perhaps through cooperating with educational institutions in the Pacific area.

7. The PTC should oversee regulatory issues (standards, costs, etc.).

8. The PTC should "foster friendship."

Most respondents agreed that the primary purpose of the Council should be to provide and "active forum" for the exchange of ideas. By doing so, 2, 3, 4, 5, 6, and 8 above would be satisfied to a limited degree. Concerns appeared focusing on prioritizing purposes and activities taken on by PTC and duplicating services offered elsewhere. The purposes of the PTC brought out in this question correspond to the role of the PTC suggested in the next question.

Communication Problems in the Pacific Area the PTC May Need to Address Over the Next Ten Years

In the First Round respondents listed several problems. In the Final Round they were asked to identify additional problems and to describe the role PTC would play in those problems. Herein is the compiled list:

1. Regulation, standardizations and costs.

2. Telecommunications technology offerings vs. user requirements.

3. Technological, economic and policy coordination and cooperation among nations in the Pacific area.

4. Natural and/or imposed barriers to "free-flow" of information (including territorial invasions due to direct satellite transmissions).

5. The discrepancy between costs and affordability/availability of facilities and services to remote island nations and developing nations.

6. The efficient use of telecommunications to encourage international trade.

7. Military and/or national defense demands vs. needs of small Pacific populations.

8. National telecommunication regulations used as non-tarriff trade barriers.

9. Telecommunications carriers procurement profiles limited to national suppliers.

10. The lack of participation of users in defining telecommunications needs.

11. The need for telecommunication and information processing skills and resources.

12. Economic and social impact studies of the future telecommunication enviornment.

13. Technology transfer.

14. Trade policy.

15. Training needs and how to meet them on an international level.

The respondents saw the PTC coming alive in the role of "active forum" for hearing, reviewing, recognizing and disseminating information on specific problems/issues such as are listed above. This corresponds with the primary purpose of the Council cited in the previous question. Acting in this role could be accomplished, for example, by holding a seminar on a specific problem and inviting appropriate entities/persons to participate in the seminars. Reports and recommendations coming out of the seminars could also be directed toward the proper entities/ individuals.

Possible policy recommendations. Activities that promote the PTC as an "active forum" as described above should be encouraged.

A PTC Computer Conferencing System/Electronic Mail Service for the Future

Opinions varied on this question. Most obvious and widespread was that such an undertaking at this point would be impossible due to costs, differing regulations, tariffs and/or lack of technological hardware at various points in the Pacific area. Despite these present obstacles, many of the respondents agreed that it is an option worth exploring for the future.

Rather than offer any possible policy recommendations, the following are comments made by some of the respondents:

1. In view of the difficulties [less affluent] and [remote] members have in attending PTC [Conferences] this would appear to offer a number of opportunities. Perhaps PTC [Council] could set as a goal the placement of at least one terminal in each member country with costs for use of the system [paid] by [each individual] user.

2. On a small scale [a computer conferencing system for the PTC] should be technically and economically possible in about the time it would take to plan it.

3. The formal establishment of a conferencing network or electronic mail system should not be encouraged. As events unfold, however, it may well be found that the most efficient way of distributing information could be by having a computer library with membership access by telecommunications. This should be allowed to take place as a natural evolution paralleling the development of such systems in society at large--with the PTC being neither a front runner nor a laggard in these respects.

A PTC Fund for Telecommunications Research and Development

In the First Round a small minority of respondents opposed the idea of the PTC setting up such a fund. Those persons said that such a move would not be proper at this time.

Others, a majority of the respondents, agreed that this would be a worthwhile direction to take over the next decade. While they agreed with the idea, most respondents warned that such an undertaking would require much consideration when allocating funds, making sure neutrality was maintained.

Steps to be taken in order to take a clear direction on funding telecommunications R & D were suggested in the Final Round. Here, they appear as possible policy recommendations.

1. Conduct an R & D "needs assessment" and from that categorize and identify gaps and unions.

2. Prioritize the projects according to the areas with the "greatest need for improved services."

3. Estimate costs.

4. Raise funds to cover the projects.

A PTC Center for Communication Policy Research, Training and Conferences

Respondents were asked to speculate on such a center. Only a small minority objected to the notion. Potential problems cited by both those in favor and those opposed included (a) funding problems, (b) danger of empire building, (c) duplication of effort, and (d) political and national conflicts which could hinder the neutrality of PTC.

This idea appears to warrant further consideration. Certain steps must take place prior to any moves toward an actual "center." One respondent said, "The magnitude, scope and severity of the telecommunications needs and voids have not, in my opinion, been clearly enough defined, evaluated and prioritized to intelligently construct a solution-oriented activity." The Council was encouraged, however, to organize conferences (and workshops, seminars and symposiums), besides the established annual PTC Conference as a beginning, and if it is indicated, provide training and research in the future.

Possible policy recommendations. The PTC should begin to lay groundwork for a center for policy research, training and conferences, considering all options and alternatives in the future event that such a move should be warranted.

Scenarios

The remainder of this chapter contains the three scenarios. The framework of the scenarios is illustrated in Table 3, found at the end of the chapter.

High Activity of the PTC from 1980-1990

The First Pacific Telecommnications Council International Seminar was held in Tokyo in the fall of 1980 in conjunction with a meeting of the Board of Trustees. The Japanese government recognized the organization as a viable, vital group. Extending their support to the Council and its objectives, several Japanese government officials met with the Executive officers of the PTC to establish good relations. Following the seminar several Japanese companies joined the Council, showing industry's commitment to their government judgment. Likewise, the PTC obtained recognition from the U.S. government following the Second PTC International Seminar which was also held in conjunction with a Board of Trustees meeting in Washington, D.C., in June of 1981. As a result of the government contacts made in preparation for that seminar, the PTC was invited to "informally" advise the Department of Commerce's National Telecommunications and Information Administration (NTIA) of PTC's viewpoint on various pending telecommunications policies. The FCC also looked toward the PTC as a consultative group in its Pacific Facilities planning process which began in mid-1981. So, the PTC entered the decade of the '80's with the support of the governments of the two largest member "groups." With this established, the leadership of the Council was encouraged to proceed--but ever so carefully as not to transform the PTC into a "U.S.-Japan" organization. A Board meeting/seminar schedule was set which included meetings in all major areas of the Pacific area by the end of the decade, to defend itself from such an undesirable eventuality.

Early in the 1980's in an effort to curb the possibility of the PTC becoming a bilateral organization (U.S.-Japan), concentrated efforts were made to solicit members from all over the Pacific area. Contacts made at the Board meetings, seminars, and workshops were followed closely. The Membership Committee outlines specific benefits to "types" of members so that the PTC could be presented accurately. Planned activities were relevant to the region as a whole. Individual membership was encouraged when funds were unavailable for non-profit memberships in less affluent areas. These efforts paid off with the maintenance of a widely represented Council. Despite increased international tensions due to energy problems and threats of nuclear warfar, the PTC became a model for cross cultural, transnational understanding and cooperation in regard to common development goals.

In order to act out the role of a forum for discussing Pacific telecommunications, the Council supported three types of activities: (a) research, (b) conferences, seminars and workshops, and (c) information services. So that these activities would coincide with the objectives of the Council (as set forth in the Charter) the three types of activities complemented each other: Data gathered through various research projects provided information to share through PTC's electronically accessible information service, PTC-NET; the PTC newsletter reported results of telecommunications research (PTC-sponsored and other related research projects) and acted as a clearinghouse on state-of-the-art information for academics and corporations; and the PTC conferences, seminars, and workshops often explored ideas that surfaced from the sometimes controversial research.

Research

In early 1982 a research project (carried out in cooperation with the East-West Communication Institute and the Research Institute of Telecommunications and Economics of Japan) aimed at defining the Pacific telecommunications policy and technical systems resource environment got underway. The planning of this project began in early 1980. Much international attention was drawn to the project as it was the first known attempt to inventory the telecommunications in an entire geographical area made up of different countries. Essentially it was designed to aid telecommunications-developed as well as telecommunications-developing countries and areas in the Pacific hemisphere. First, a systematic accounting (by country) of telecommunications facilities/ resources was conducted. Then their needs for the future were projected and recommended steps for implementation were made based upon their own development needs. In respect to the developing nations and areas, the information, experiences, problems, and helps which became available proved to be a powerful resource. Although the project spanned the entire decade of the 1980's and beyond, by 1986 the data were being used extensively to aid telecommunications systems development in the Pacific hemisphere and the world.

Conferences, Workshops, and Seminars

The Pacific Telecommunications Council conferences, workshops, and seminars were highly regarded in the world telecommunications community because of the diversity of individuals and interests they brought together to discuss telecommunications issues in the spirit of mutual help. Conferences were still held annually in Honolulu along with a well-developed, concurrent workshop offered for university credit via the University of Hawaii and the East-West Communication Institute. The Conference Proceedings became a highly respected "yearbook" of telecommunications reporting the latest in technical and policy developments in the hemisphere. Seminars accompanied Board meetings held all around the Pacific; workshops were held wherever there appeared to be a training or information need.

Spring, 1982	Board meeting and seminar in Manila, P.I.
Fall, 1982	Workshop on portable satellite earth stations in Rarotonga, Cook Islands
Spring, 1983	Board meeting and seminar in Santiago, Chile
Spring, 1984	Board meeting and seminar in Sydney, Australia

Fall, 1984 Workshop on educational broadcast television development in Mexico City

Spring, 1985 Board meeting and seminar in Singapore

Spring, 1985 Board meeting and seminar in Montreal, Canada

Fall, 1986 Workshop on submarine cable planning in Seoul, Korea

Spring, 1987 Board meeting and seminar in Fiji

Spring, 1988 Board meeting and seminar in Okinawa

Fall, 1988 Workshop on facilities management/maintenance training in Port Moresby, Papua New Guina

Spring, 1989 Board meeting and seminar in Honolulu, Hawaii

Provisions were made for teleconferencing via PTC-NET--an experiment using donated satellite/cable links and complementary terminals--from all over the world to these events when the frequency of activities and cost of air travel began to exceed the means of many members and interested non-members. By the end of the '80's this group of activities became known as a "travelling institute"--a modification of plans for a permanent institution for conference, research, and training proposed earlier in the decade. Executive and academic telecommunication leaders on sabbatical worked out of the Honolulu office to plan for these events. The PTC also invited experts to address the seminars and used experts within the PTC to teach the workshops.

Information Services

Information services expanded. In 1981 the PTC office in Honolulu acquired a word processor and a mini-computer which aided in providing these services. These two pieces of equipment also subsequently served as the PTC-NET electronic message and conferencing system. The Human

Resource Directory (HRD) became a valuable source for putting people of common interest in contact with one another. This service was used not only by Council members but was popular with others outside the Council who had need of information such as was stored in the HRD data base. The HRD was one of the first of its kind in the field of telecommunications. (The HRD data was transferred to PTC's system after the original agreement between PTC and a Honolulu-based word processing services was satisfied in early 1982.) Similarly, the information gathered through the Survey of Other Entities (a project designed to discover other communication entities' interest in Pacific telecommunications) was placed on an electronic system at the East-West Center through an agreement with the East-West Communication Institute. The information was often acce-sed to provide various telecommunications administrations with information about orga-izations involved in projects attempting to find solutions to specific communications problems. The fees gathered for these information searches from the users helped fund additional PTC projects.

In 1984 an experimental computer conferencing system was used to conduct a year-long group parley among the Board of Trustees entitled, "PTC in the '80's and '90's." The activity evaluated the accomplishments of the PTC in its first four years of life and made recommendations for the future. One option explored in the activity was whether or not to maintain an on-line system for continued discussion on vital issues facing/being explored by PTC. Continued experimentation was recommended.

In the later part of the decade, 1987-89, the PTC reached a transition point. The information activities had clearly moved from a solely information clearinghouse role to an information generating role. The types of research projects being conducted were funded by grants from "neutral foundations" as well as corporations. A researcher was added to the permanent staff in 1987. Field studies were contracted out. However, the Executive Board recommended in 1988 that a permanent facility be planned for and a three person research staff be hired over the next five years.

The organization had clearly proved its legitimacy in the '80's and entered the '90's with as much or more hope than it had at its inception.

Diminishing Activity of the PTC from 1980-1990

The early 1980's were promising years for the Pacific Telecommunications Council. Corporate, non-profit, and individual members contributed much voluntary support in the first two or three years of the Council's existence. Membership doubled from January,1981 (80) to January, 1982 (163) and again by January, 1984 (325). Unfortunately the membership did not grow proportionately (e.g., there was overrepresentation of private, corporate members and few Pacific islanders, academics, or researchers). However, the government of a majority of the countries represented on the Council officially recognized and supported the organization by endorsing its activities. While membership grew, Council activities diversified.

Conferences, Seminars, and Workshops

The Pacific Telecommunications Conferences began meeting every 18 months in 1984 due to declining attendance. The conference's organizers hoped that meeting very year and a half would stimulate interest and attendance. PTC international seminars on overly specialized topics were organized and held around the Pacific hemisphere annually. Unfortunately, Pacific island locations were frequently overlooked, blocking the way for smaller nations to be recognized by and feel useful to the organization. The seminars addressed the specific telecommunications problems and issues in the geographic area the meeting was held. Due to logistic and energy problems, Honolulu became the primary Pacific island location. Other typical locations were Manila, Ottawa, San Diego, Santiago, Sydney, and Tokyo. When airfare costs became prohibitive (an increase of 300% from 1979) to or from small island nations, an effort was made to draw those members and guests into the conferences and seminars via existing PEACESAT satellite hook-ups. While the PEACESAT service was a tremendous help to Pacific island members, it became unavailable when NASA took ATS-1 out of service in 1984. This drastically reduced the ease and increased the cost of inter-island teleconferencing.

The Executive Board elected and Director appointed in 1983 committed the Council to a heavy schedule of Board meetings, seminars, and workshops which lacked contingency plans if low-cost teleconferencing became unavailable. (A major international issue outside the realm of PTC surfaced during the mid-80's focusing on the loss of ATS-1: Who--government or private industry--was responsible for restoring inexpensive satellite communication in the Pacific? Did the majority of that burden fall on the U.S., Japan, and other developed nations? Technically the U.S. was responsible for telecommunications services in the Trust Territory for 20 years after its new governments formed in the early 1980's, but did not feel responsible to provide a service such as ATS-1 to all the nations of the Pacific. Unfortunately, neither did any other entity emergy to provide a Pacific public service satellite.)

Research

The Council initiated various non-focused research projects generally aimed at gaining understanding of the Pacific telecommunications environment, but lacking a coherent framework. Reporting on these activities was informal and disorganized. The "Survey of Other Entities" which was conducted in 1981-1982 was grossly neglected. The PTC had gathered a valuable collection of data, but little was ever done to make the data useful or available to others. At best it became a PTC internal reference library.

Problems

In the meantime, an increasing number of corporate level entities were joining the Council from the U.S. and Japan. Council leadership lacked the commitment of those involved from inception to keep the Council membership growing proportionately. Although a PTC "Composition Policy" was developed early in the 1980's to insure a balance of members on the Board of Trustees, with the disproportionate membership of the Council, balance of the Board became impossible. Small island nation membership simply was not expanding at the rate of other, larger nations. Costs of the Council, its activities and offices required large financial contributions, and the Pacific island nations simply could not afford to join. The PTC had to make a policy decision--whether to leave the seats on the Board empty when there was a lack of appropriate members to fill them, creating a very small Board, or to fill them with other members, upsetting the carefully planned-for balance. The first option was decided upon.

Many of the members represented large, profit-making corporations and simply could not see the necessity of diverse, sometimes contrary opinions on Council activities. Eventually the activities of the Council began to focus on the wishes of those corporations to the exclusion of academics, researchers, and small users. The Council remained dependent upon its members to volunteer their time and money to attend planning meetings and elaborate seminars and workshops. It became impossible for the smaller nations' members to financially or technically keep up with the U.S.-Japan profile.

Coordination of activities with other entities involved in Pacific telecommunications declined to the point where PTC served only the information needs of its members. For example, the international seminars concerned such high-level technology that they lacked significance for Pacific island basic telecommunications problems and needs. Thus, the benefits for the Pacific Islanders became intangible and unjustifiable to continue supporting the Council. Likewise, individual members could not get attention or recognition because they represented such a small monetary contribution to the Council. It became apparent to this group of individual and Pacific island members that the original intents of the Council were being neglected. Soon membership from these two groups were not renewed.

The PTC Board of Trustees realized the problems facing the Council. With the loss of so many Pacific island and diverse individual members (which actually served to legitimize the foundations of the Council), the life of the organization was in critical condition. It was obvious that the caliber of leadership did not exist to pull the Council back on track.

Some of the Japanese and American corporate members formed lobby groups to introduce legislation in their respective countries supporting a bi-lateral agreement to aid the restoration of affordable satellite service to the Pacific area, hoping that this effort would draw back some of the lost members. However, this was seen by many as a ploy of the powerful members to bring more profits into their own companies. By 1987 these efforts had caused a major chasm in the Council--those in favor of direct governmental aid and those in favor of a governmental "hands-off" policy. In 1988, two-thirds of the Japanese contingency pulled out of the Council to pursue their own telecommunications interests in the Pacific with support from their government. This put even more pressure on U.S.-Japan formal and informal diplomatic ties and trade agreements. The few remaining "neutral" PTC members could not maintain the Council operations at its former level, and during 1989 steps were taken to dissolve the Pacific Telecommunications Council.

Moderate Activity of the PTC from 1980-1990

The Pacific Telecommunications Council's leaders spend the first three years of the Council's existence carefully planning the future direction of the organization. Extreme caution was taken in creating the proper image for the Council. Much time was spent in drawing up documents to govern the Council to insure that they would be internally consistent.

By the end of 1982 the Council had begun working its way into an "information clearinghouse" role. Word-of-mouth was responsible for the growing use of the Human Resource Directory--an electronically assessible data base of communication professionals--by members and non-members. People traveling and doing research outside of their own countries were the biggest users of the service. Coupled with the data the Council had collected in its "Survey of Other Entities" the Council's reputation as a very reliable source of information on Pacific Telecommunications developments was well established by the end of 1983.

The PTC newsletter enjoyed a wide circulation by the middle of the 1980's. This was largely due to (a) a large pool of contributing writers--Council members as well as interested others involved in business, research, and technical aspects of Pacific telecommunications, and (b) the creation of a "subscriber" category of PTC membership which kept interested parties informed of Council activities, but did not allow voting rights on the Council. While the newsletter contained Council business, a majority of the publication was dedicated to reporting on timely telecommunications developments in the Pacific area. In 1985 the publishing schedule was increased to six issues annually. In 1986 a year-end digest of events and developments was established as an addendum to the December issue.

The Council embarked on some ambitious research projects in the early 1980's. The projects were always conducted hand-in-hand with well-established research institutions (e.g., the East-West Center, U.S., and the Research Institute of Telecommunications and Economics, Japan) and funded various funding agencies and the users of the information. The research was often performed as a consultative endeavor as well as a research project. For example, the Council aided many developing areas by collecting data on their existing telecommunications facilities, conducting further needs assessments based on their development plans, and working out recommendations for the future. The groundwork for these projects would be supplied by the research institutes, and the more "consultative" portions would come through the PTC. The end results were turned over to the country involved, but the Council retained the right to publish reports on the studies for sale. This became a sought-after service and by 1986, when the process had become well worked out, the Council hired a "project monitor" to handle the logistics of the projects.

The Council maintained a high quality of conferences, seminars, and workshops. The philosophy of the PTC in regard to this group of activities remained one of an information service. Therefore, the "themes" of the conferences, seminars, and workshops focused on current Pacific telecommunications information needs. In the case of seminars and workshops, which were held at various sites throughout the Pacific area, the themes often focused on the telecommunications information needs of the area.

The Council encouraged those who could not travel to the meetings due to the astronomical increase in air travel to attend via teleconferencing. And many did attend due to some encouraging developments in satellite communications. Satellite earth stations became more affordable when a portable six-meter dish was brought on the market in 1982 (it was formally announced and demonstrated for the first time at PTC '82) for approximately $20,000. It could be run on solar power, required no air conditioning, and was compatible with the existing INTELSAT network. This development popularized Pacific teleconferencing, made it easy, relatively inexpensive, and helped to increase the overall telecommunications (technological) literacy and participation of the Pacific population.

PTC's role as an informal advisor to Pacifc area telecommunications authorities grew. Japan and the U.S. had put their confidence in the organization in the early 1980's. As the decade proceeded, more and more Pacific governments sent representatives from the telecommunications sectors to PTC meetings. The PTC had established good government relations with most Pacific rim and island countries by the end of the decade. (The U.S.S.R. held two individual memberships on the Council by 1987.) However, the Council had to guard against pressure coming from some of the more powerful governments trying to sway the Council toward biased positions and activities concerning major international telecommunications policies.

In the first ten years of existence the Council had moved conservatively while gaining face in the Pacific community. It held to its goals and had made a good name for itself. In 1988 the Council embarked on plans to increase their activities in the nineties.

Table 3

Scenario Matrix Completed

ROLES OF THE PTC	ACTIVITIES		
	HUMAN	INFORMATION	COORDINATING
HIGH ACTIVITY Fast growth with solid plans and solid backing from members and outside entities.	Full schedule of annual Conferences, annual Board meetings and Seminars, and Workshops. Teleconferences and computer conferences. Membership recruitment planned for desired members.	PTC acts as information "clearinghouse" moving into an information generating entity. Newsletter reports on timely Pacific telecommunications developments and research projects. Information services (Human Resource Directory and Entity Survey) used by members and non-members.	Research projects carried out in cooperation with the East West Center and the Research Institute of Telecommunications and Economics. Project funds from "neutral" agencies as well as corporate donations. PTC-NET set up with donated equipment and donated satellite and cable links. Informal advising to various governments and telecommunications administrations.
MODERATE ACTIVITY Conservative growth while building a solid base.	Annual Conferences held in Honolulu. Annual Board meetings held in conjunction with Seminars. Workshops held only when an information need is cited. Teleconferencing to the annual Conference available.	Newsletter increases to six issues per year with a "year-end digest" added. Articles contributed by members on various Pacific telecommunications developments. Some internal "PTC" news. PTC acts as an information "clearinghouse" only.	Research is at a moderate level mostly for PTC's edification. Very cautious operating with existing, stable institutes. Some consulting.
DIMINISHING ACTIVITY Growth unporportionate without proper planning.	Conferences held every 18 months. Heavy Seminar and Workshop schedule. Poor leadership. Unplanned membership recruitment.	Quarterly Newsletter with unsubstancial content. Uncoordinated reports on research.	Research projects lack framework. Neglectful of cooperative efforts with other telecommunications entities.

CHAPTER 6

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This study involved the close examination of a newly created international organization, the Pacific Telecommunications Council (PTC). The purpose was to suggest possible alternative directions in which the organization could develop. This was achieved by (a) plotting the history of the organization to set the context for the problem under study, (b) conducting a two round international Policy Delphi study, and (c) developing three scenarios depicting alternative futures of the Pacific Telecommunications Council.

The history was developed by systematically examining pertinent documents related to the origin of the Council. The documents used to uncover the "roots" of the organization came from two main sources. Documents that existed prior to the incorporation of the PTC were obtained from persons who were involved in originating the concept of the organization. Other documents used to complete the history were from the PTC files.

The Policy Delphi study consisted of two rounds of questions dealing with policy considerations for the future of the PTC. It was distributed by mail to the 34 members of the PTC Board of Trustees under the authority of the Council Director. The first round of questions was mailed in late July, 1980 and analyzed in late September. The Final

Round was distributed in November, 1980 and analyzed in late December. Sixty-seven percent of the respondents returned Round One of the Policy Delphi and 45% returned the Final Round. The Final Report was given to the members of the Board at a meeting in June, 1981.

The scenarios were developed to indicate three possible alternative futures for the PTC. They were primarily based on the data gathered by the Policy Delphi. They suggest three possible roles for the PTC over the next ten years. The first scenario depicted a highly active Council gaining recognition in the Pacific hemisphere as a vital component in development of telecommunications in the region. The second scenario showed a moderate development of the Council over the next ten years, becoming only slightly more active than at present. The activities of the PTC diminished in the final scenario as the organization looses sight of its original goals and subsequently dissolves.

This study is important because it has contributed to the small "library" of Policy Delphi studies. In the course of the study the monitor was able to find only two actual write-ups on other Policy Delphi studies. One other study, under progress, was inaccessible. This method, then, is important in terms of contributing to the development of methods in the inexact sciences, especially in futures research policy science and the emerging communication policy science.

Conclusions

In this section critically examines the Policy Delphi. In addition, recommended changes involving the method are found in the final section of this chapter.

Appropriateness of the Method for the Problem

In chapter 4 the unusual features of the Policy Delphi were superimposed on the unique characteristics and problems of the Pacific Telecommunications Council. It was established that the Policy Delphi is appropriate to survey individuals who are geographically dispersed. The PTC Board of Trustees are regionally dispersed. Further, the Policy Delphi can be used as a policy guide and as a parallel activity to other policy creation activities. The PTC Board of Trustees was and is currently developing policies to guide its future. Finally, the Policy Delphi is capable of gathering a spectrum of opinions on possible policies. In this regard, the Executive Board of the PTC Board of Trustees preferred to take as many opinions under consideration as possible in making policy decisions. For these reasons, the major method used in this study, Policy Delphi, seemed appropriate for the problems under consideration.

Gathering a group of four or five persons together who live within commuting distance of each other for a few hours of discussion on a given topic can be a difficult task. Even with a set agenda for discussion, the focus of such a meeting can easily be lost, interrupted or blurred. Reactions and opinions may be guarded to avoid controversy. The participants of this Policy Delphi were as far from each other as Washington, D.C. and Manila, Alaska and Chile. Yet this gruop carried out a dialogue without being called together into one place and created a rich bank of information to build from. Further, the questions were answered concisely and in a straight forward manner without loosing the focus of the questions. During this research activity, ideas were expressed which clarified the alternative directions of the Pacific

Telecommunications Council. In this way the policies enacted best serve the membership and carry out the objectives set out in its Charter.

The method was straight forward and understandable. The participants were asked to answer selected questions according to their own position. Their answers were synthesized and reported back to them with a second related question to consider. One shortcoming of the questionnaires used in the Policy Delphi was that they were not available in the native tongue of each of the participants. This problem undoubtedly decreased the quality of participation on the part of some respondents.

Evaluation of Policy Delphi Results

One hundred percent participation was not achieved. This problem could have been due to inadequate instructions, justification of the study, or lack of time and interest on the part of some of the participants. Perhaps a letter of explanation and endorsement by the Council President would have clarified the purpose of the study to those who may have questioned its relevance. Also, a short follow-up letter should have been mailed no more than one week after the questionnaires were sent. A shorter turn around time between Round One and the Final Round could have helped sustain the interest of the participants.

Responses were obtained from each of the geographic subdivisions of the Pacific hemisphere represented on the Board of Trustees, however, the group chosen to participate in the Policy Delphi was admittedly unbalanced. The Board of Trustees was heavily dominated by Americans. Table 2 in chapter 4 shows the actual breakdown of responses. Approximately half of the responses in each round were from Americans. In Round One, 55% of the Americans surveyed responded while 100% of the

Japanese, Pacific Islanders and Canadians responded and 50% and 60% of the Southeast Asians and Latin Americans responded, respectively. (No Australians responded in the first round.) In the Final Round, 35% of the Americans responded while again 100% of the Japanese, Pacific Islanders, Southeast Asians and Australians responded and 20% of the Latin Americans and 0% of the Canadians responded, respectively. The high percentage of responses from the non-American deligation in no way eradicates the severe imbalance in the response group. It can be projected, therefore, that the results are skewed and heavily biased toward the American viewpoint. This imbalance could have been avoided by selecting a more representative group of participants from the PTC membership at large.

Remarks About the Policy Delphi Results

Observing and recording (in the history chapter) the changes in the Council over the time frame of this study pointed to some interesting policy developments. For example, question number two of the Policy Delphi asked about "balance" of membership. The most frequent response recommended concentrating on a "balance" of members on the Board of Trustees. A "Composition Policy" dictating the make up of future Boards of Trustees has since been developed, accepted and is presently being implemented by the PTC. Another example, question number seven asked what languages the PTC should use for its publications. English, Japanese and Spanish have since become the "official" languages for many of the Council's publications. Further, the PTC Planning Committee has recommended that all future major PTC events provide simultaneous interpretation in these three languages to insure the best and fullest participation of its members and guests. Question number eleven asked if a PTC fund for telecommunications research and development should be created. The participants recommended that as projects were proposed, funds should be sought to cover their budgets. The PTC now has several projects under consideration. Funds will be secured as the proposed projects become realities.

In these and other instances the overall results of the survey and the activities of the Council appear to be complementary. In many contexts the Policy Delphi information has entered into face-to-face policy discussions. The method, regardless of its shortcomings, has served its purpose in providing a source of opinions on which to base creation activities.

Role of the Monitor

In the initial stages of this study the monitor had no formal ties with the Pacific Telecommunications Council. The monitor's association with the Council became formal when the proposed study was accepted in April, 1980. Throughout the time the Policy Delphi was conducted the role of the project monitor was solely an independent researcher. After the completion of the Policy Delphi study the monitor was hired by the PTC Director as the "Conference Assistant." The scenarios had not been generated at this time and, as a result, new information and insights were combined with the Policy Delphi information to complete the final phase. This later association can also be interpreted as adding a bias to the final scenarios. This should be noted as the scenarios are subjective and biased in contrast to the Policy Delphi results and the history portion of the study. The monitor's role during the Policy

Delphi study was solely that of a "monitor." The role as "participant observer" in the later part of this study was also deemed appropriate although it admittedly biased the structure and content of the scenarios.

Recommendations

Several changes are recommended in this section to make the study more meaningful for the respondents and to improve the overall flow of the Policy Delphi process.

Changes in the Survey Format

Given a more flexible budget for this study, a major change in this particular Policy Delphi study would be to have the survey available in English, Spanish and Japanese. This change would obviously introduce new problems due to translation needs, but would make for a more relevant experience for the response group by allowing them to respond to the questions in their first language. This would also add to the cost of the study, but would be worth the extra effort in terms of the freer and more complete expression of opinions on the part of all respondents. The essense of this method is a dialogue. So much can be lost or missed in face-to-face cross-cultural communication. A sensitive, aware person can be sensitive to this fact, but may not be able to synthesize it in a personal encounter much less in a written exercise. Allowing the subjects to be questioned and to respond in their own language could only add to the integrity of the dialogue and the insights gained from it.

Having the survey available in three languages could possibly slow down the turn around time on the rounds of questions if not adequately planned for. Therefore, introducing this recommended change in the process and format require extra planning as well as cost, but the payoff is deemed worth it.

Changes in the Policy Delphi Process

An effort would be made to encourage (a) fuller participation, and (b) a shorter time-lapse between the first and final rounds of the study. The major reason for the delay between rounds was due to the use of international and domestic mail to distribute the questionnaires. Given the budget and capabilities, the process would be vastly improved if it were conducted over an interactive computer conferencing network or telephone interviews. The "novelty" of the conferencing network would likely improve participation and relieve the slow down of responses caused by inefficiency in international and domestic mail services. Possible problems would emerge in accessing and training of respondents on computer terminals.

A second, possibly more critical change would be to use at least three persons to synthesize the results. This is necessary to "check" the monitors' evaluations and summaries of the responses. When only one person evaluates and synthesizes the results there is always the chance that they will be skewed, biased, or misrepresented by the monitor. The use of at least three "coders" would improve the integrity of the study.

Finally, a more representative group of respondents would be selected in order to obtain a wider spectrum of ideas and opinions on the selected policy questions. This change would serve to vastly improve the study and increase the reliability of results.

Overall this study could be improved by being more sensitive toward the response group and dealing more precisely with the responses. As it stands, this study has fulfilled the goals it set forth, has provided input in the areas of futures and communication policy research and has served as a positive step toward the policy-making process of the Pacific Telecommunications Council.

PACIFIC TELECOMMUNICATIONS COUNCIL

Appendix A

July 30, 1980

Mr. Jack Lyle, Director
East-West Communication Institute
1777 East-West Road, JAB 2124
CAMPUS MAIL

Dear ~~Mr. Lyle~~ Jack:

The Executive Board of the Pacific Telecommunications Council's Board of Trustees asks your participation in a policy forming exercise. The enclosed survey is the "first round" of an activity which is being conducted in order to discover possible future policy alternatives/directions for the Pacific Telecommunications Council.

The purpose of this exercise is to obtain the widest possible spectrum of your opinions on possible policies in order that the Pacific Telecommunications Council can fulfill its future objectives. As you know, we are a diverse group and we must seek the thoughtful opinions of everyone if we intend to form comprehensive and balanced future policies and directions.

After you have completed the survey and returned it to me, your responses, along with those of the other Trustees, will be synthesized. These results will be returned to you in the form of a "second round" of questions. Your answers and opinions will be kept in strict confidence. Your name will not be associated with any statement or position taken. The information you supply will be used only as a guide in later policy formation.

Your assistance in this activity is greatly appreciated. Please return the questionnaire by August 31, 1980. Thank you for your cooperation.

Sincerely yours,

Rich

Richard J. Barber, Director
Pacific Telecommunications Council

Encl: Questionnaire
      Return Envelope

2424 Maile Way, #704
Honolulu, Hawaii 96822
Telephone: (808) 941-3789
948-8019
Telex: 634134
Cable: PACTELECOM

PACIFIC TELECOMMUNICATIONS COUNCIL

POLICY DELPHI

ROUND ONE

Please answer the following questions keeping in mind Pacific Telecommunications Council PREFERRED directions over the next ten years. Feel free to use additional sheets of paper if you find the space provided confining.

1. In regard to the PTC Conferences:

What time of year should the Conferences be held?

How many days should they be?

How often should they be held?

Should the location rotate or continue to be in Honolulu?

Should they remain "broadly" focused or should a more restrictive theme be developed for each conference?

What role should suppliers and vendors be given at the conferences?

In what way would you suggest Pacific Telecommunications Council members keep informed of pertinent developments or research findings in addition to or instead of PTC Conferences?

2. Concerning Pacific Telecommunications Council membership:

How can the Pacific Telecommunications Council encourage a well balanced membership?

Suggest some present or potential imbalances in Pacific Telecommunications Council membership.

How can these be corrected (e.g. through active recruitment of desired interest groups or organizations)?

What are the characteristics of entities/individuals that should be recruited as potential members and how should the Pacific Telecommunications Council go about it?

PLEASE GO TO NEXT PAGE

3. Article IV (Membership) of the Pacific Telecommunications Council Charter reads ". . . *Application for membership is invited from all individuals, entities, organizations, and institutions having an interest in telecommunications and related developments in the Pacific area . . .*" How would you define the Pacific area?

4. Suggest some alternative Pacific Telecommunications Council sources of funding other than membership fees. (List 2-3).

5. What services, if any, should the Pacific Telecommunications Council provide for its members over the next ten years (1980-1990)? (Suggest at least 3).

6. What types of information (and how often and what form) should Pacific Telecommunications Council members receive about the organization?

PLEASE GO TO NEXT PAGE

7. Should any or all official Pacific Telecommunications Council publications be printed in languages other than English? What languages do you suggest? Which publications?

8. List the key purposes of the Pacific Telecommunications Council as you see them ten years from now (1990). (List at least 3).

9. As you see it, what are some significant communication problems in the Pacific area that the Pacific Telecommunications Council may need to address over the next ten years? (List at least 3).

10. In a short paragraph, discuss the advantages, disadvantages and possibilities of the Pacific Telecommunications Council setting up a computer conferencing network and electronic mail system with each member having access to the systems.

PLEASE GO TO NEXT PAGE

11. Should the Pacific Telecommunications Council set up a fund for telecommunications research and development projects in the Pacific area? Discuss the pros and cons of the idea.

12. Should the Pacific Telecommunications Council create a center for communication policy research, training and conferences? In a paragraph or two please discuss the pros and cons of the idea.

13. Suggest a question which should be included in the next round of this activity.

THANK YOU FOR YOUR ASSISTANCE - - PLEASE RETURN THIS QUESTIONNAIRE IN THE ENCLOSED ENVELOPE.
SIGNATURE ______________________________
(For internal purposes only).

University of Hawaii at Manoa

Department of Communication
2560 Campus Road • Room 313
Honolulu, Hawaii 96822
Telephone: (808) 948-8715 • Cable Address: UNIHAW

September 24, 1980

MEMORANDUM

TO: Mr. Jorge Kanahuati, Chairman of the Board,
Pacific Telecommunications Council

FROM: Kari J. Anderson

RE: Pacific Telecommunications Council Policy Delphi Round One

Enclosed you will find a preliminary report on the first round of the PTC Policy Delphi I am conducting under the direction of Mr. Richard Barber and Dr. Dan Wedemeyer. As you will recall, I mailed this first round to the members of the Board of Trustees in late July. As of September 22, 1980 I have received back 17 of the 34 surveys mailed. Respondents include John deMercado, Juro Oizumi, Robert Walp, Emanuel Fthenkis, Stuart Kingan, Howard Pappert, Joseph Gancie, Hajime Mizuguchi, Richard Barber, Nestor Virata, Robert Englebart, Ithiel de Sola Pool, Elizabeth Young, John Eger, Del Harmon, Nozomu Takasaki and one who did not sign his survey. Due to the number of surveys which have not yet been returned (some Trustees have indicated that theirs are forthcoming), I must stress that this report is preliminary and could change with the additional responses.

The format of the report is quite simple. I have synthesized the responses for each question and recorded them on the original survey sheet. Where extra space was needed, I have added attachments. This should give you an idea of the trends in possible policy the members of the Board are considering.

The format for the second round will be very similar to the first round. Questions that seemed to reflect no further need of exploration will be dropped. Questions which suggest the need of further explication or discussion will be repeated. For example, most sections of question one showed general satisfaction with present policy. However there was controversy over the section of the question concerning location of PTC Conferences. In the second round, question number one may appear as such:

"A general feeling of satisfaction is reflected by the Board of Trustees in regard to current policy concerning PTC Conferences, and a continuation of the same in the future seems in order. However, a major difference in opinions appeared over the question of location for the Conferences. A majority of the respondents would like to see the Conferences held in locations other than Honolulu on a rotating basis. Please react to this idea. If you wish, include some possible locations and strategies for selecting the alternative locations."

Each question would have a summary statement (without naming the source) from the first round and a new or similar question to answer. I anticipate fewer questions being asked in the second round.

As explained in my project proposal, this "Policy Delphi Method" of research was chosen 1) to encourage full participation of the members by soliciting individual rather than collective responses, and 2) to insure anonymity of responses and discourage "bandwagon" or "peer pressure" answers to important policy questions. In order to remain with the intent of the methodology and insure unbiased responses in the second round of the Policy Delphi, I have asked Mr. Barber not to present this preliminary report to the Board of Trustee, but to confine it to the Executive Committee. I understand, he will be making a general statement on the progress of the project to the Board and encourageing those members who have not completed round one to do so shortly.

Mr. Barber, Dr. Wedemeyer and I are all very pleased with the results of the project thus far. However, as with any similiar project, deadlines are pushed back by problems rising from international mail services, failures to respond, etc. It is my intent to complete this project by the January Board Meeting during the PTC '81. Mr. Barber, Dr. Wedemeyer and I have discussed asking you for your endorsement and a bit of encouragement to the Board to complete the second round survey as quickly as possible. This would be in the form of a letter or memo to be mailed out one week after the second round survey is mailed. We feel that this would speed the returns and the Board can receive this input in January '81. Your help would be greatly appreciated.

I hope that the information I am sending is sufficient. If you have any questions or suggestions I am sure you will send them back to Honolulu with Mr. Barber. I look forward to meeting with you agian in January.

PACIFIC TELECOMMUNICATIONS COUNCIL

- - -

POLICY DELPHI

ROUND ONE

Please answer the following questions keeping in mind Pacific Telecommunications Council PREFERRED directions over the next ten years. Feel free to use additional sheets of paper if you find the space provided confining.

1. In regard to the PTC Conferences: A general feeling of satisfaction is reflected by the Board of Trustees in regard to current policy concerning PTC Conferences, to be continued in the future.

   What time of year should the Conferences be held?
   A majority of respondents consider the winter months, preferably January, as the best time of the year for conferences to occur. A few members gave consideration to "off-season" and summer months to accomodate "vacation" times for persons in the academic field.

   How many days should they be?
   Again, there is an overall feeling that a three day agenda is satisfactory, with a few members opting for a slightly shorter/longer time span for the conferences.

   How often should they be held?
   Most respondents were in agreement that policy providing an annual conference is desireable. There is the slightest suggestion that a conference on an every-other-year basis might attract more people. Also, it was suggested that "special topics" conferences/seminars be held on an ad hoc basis throughout the year.

   Should the location rotate or continue to be in Honolulu?
   A major difference in opinions appeared over this question. A majority of the respondents would like to see the conferences held in locations other than Honolulu on a rotating basis. Suggestions included San Francisco, Los Angeles and other places in the Pacific area.

   Should they remain "broadly" focused or should a more restrictive theme be developed for each conference?
   The overwhelming opinion of the Board was to leave the conferences with a broad focus of topics. There was only the slightest desire expressed for specific themes to be assigned to conferences, or at least not to be ruled out.

   What role should suppliers and vendors be given at the conferences?
   Policy opinions concerning the role of vendors at the conferences ranged from displayer/exhibitors/demonstrators to financial supporters, participants in panel discussions, hosts of events and informants on "the status of telecommunication research and development in the Pacific."

   In what way would you suggest Pacific Telecommunications Council members keep informed of pertinent developments or research findings in addition to or instead of PTC Conferences?
   Policy leaning toward an eventual electronic information services for "keeping in touch" purposes is suggested. A "newsletter" for the near future is recommended. Practical suggestions included participation in related conferences, seminars and reading professional journals.

2. Concerning Pacific Telecommunications Council membership: There is some strong opinion of future policy for membership in the PTC.

   How can the Pacific Telecommunications Council encourage a well balanced membership?

   SEE ATTACHED SHEET

   Suggest some present or potential imbalances in Pacific Telecommunications Council membership.

   SEE ATTACHED SHEET

   How can these be corrected (e.g. through active recruitment of desired interest groups or organizations)?

   SEE ATTACHED SHEET

   What are the characteristics of entities/individuals that should be recruited as potential members and how should the Pacific Telecommunications Council go about it?

   SEE ATTACHED SHEET

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3. Article IV (Membership) of the Pacific Telecommunications Council Charter reads ". . . *Application for membership is invited from all individuals, entities, organizations, and institutions having an interest in telecommunications and related developments in the Pacific area . . .* " How would you define the Pacific area?

A majority of the respondents gave very specific definitions of the Pacific area. One such comment reflects the feelings of that majority: "The Pacific area comprises the Pacific Ocean and the countries within or adjacent to its contiguous seas." Variations and/or other contingencies included "those with heaviest transpacific traffic," "those countries that can be accessed thru the Pacific Ocean Satellite System," "excluding the USSR," China, India, USSR, North, Central and South America and all Pacific island nations. Some more general definitions included "the wide world" and some European countries and other entities which have interests in the Pacific. It was also suggested that no definition is necessary unless there is an unforeseen situation in which an entity or individual is denied membership because it is judged not to have an interest in telecommunications in the Pacific area.

4. Suggest some alternative Pacific Telecommunications Council sources of funding other than membership fees. (List 2-3).

Ideas for Pacific Telecommunications Council funding are abundant. The most frequent suggestion is grants from neutral foundations (NSF, JSPS, JICA, Ford, Carnegie, Markle, ICA, etc.). A concern was brought forth that the funding agencies not set conditions. Likewise, a commonl- held view is to obtain funds from governments, (especially developed nations), government agencies and multi-national governments and/or businesses without conditions . . . Other suggestions include fees for PTC Conference attendance by non-members, fees for topical seminars sponsored by the Pacific Telecommunications Council, sale of (research and other) publications, conference income/vendor fees, and services (i.e. consultations) rendered.

5. What services, if any, should the Pacific Telecommunications Council provide for its members over the next ten years (1980-1990)? (Suggest at least 3).

Concerning future policy for services provided by the Pacfic Telecommunication Council over the next ten years, "information" services seem to be of great concern. Suggestions include newsletters, Board Meeting minutes, Membership Directories, Human Resource Directories, reports on telecommunication support of social services, "accessible listings: experts, bibliographic, organizations," education (i.e. lobbying) publications to include a "manual of regulations, rates and service offerings of carriers/administrations in the Pacific area," biographical information on members in related areas, market projections, product requirements and forthcoming services. Other responses suggest policy which would establish the PTC as a "coordinating" entity for various international endeavors (satellite systems, etc.), and organizing/sponsoring seminars on relevant topics.

6. What types of information (and how often and what form) should Pacific Telecommunications Council members receive about the organization?

In the area of information provided to members by the PTC (how often and what form), two major policy concerns emerged. First, that important information (PTC activities, financial matters, membership) be distributed in newsletters (preferably quarterly or bi-monthly) and special publications. Secondly, information distributed by the PTC should not be limited to interorganizational affairs. An effort should be made to include reports on projects and relevant developments occuring in the Pacific area, especially about projects in developing nations. Finally, it is suggested that the policy on this question remain open enough to ensure flexibility in the event that new needs be defined by the members.

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7. Should any or all official Pacific Telecommunications Council publications be printed in languages other than English? What languages do you suggest? Which publications?
Most respondents felt that publication printed in English will be sufficient for all publications. However, a noticeable minority feel that major publications and publications intended for specific areas (i.e. seminar announcements) should be made available in other major languages such as Spanish and Japanese. Some felt that for the immediate future or until funds were made available for translation, most things should remain in English, but that it is an important issue to discuss.

8. List the key purposes of the Pacific Telecommunications Council as you see them ten years from now (1990). (List at least 3).
Several themes ran through the responses to this question. Those "purposes" included were 1) that the PTC provide an active forum for the exchange of ideas, 2) that it coordinate and cooperate with other related international organizations on projects, etc., 3) that it provide information services/exchange point for developing nations and other special interest groups, 4) "foster awareness" of and promote telecommunication technological changes, uses, and alternatives, especially in respect to developing areas of the Pacific, 5) to hold conferences, sub-conferences, seminars and lectures (on specific topics), 6) "disseminate research findings," 7) oversee regulatory issues (standards, costs, etc.), and 8) "foster friendship."

9. As you see it, what are some significant communication problems in the Pacific area that the Pacific Telecommunications Council may need to address over the next ten years? (List at least 3).
The respondents see the following as "significant communications problems in the Pacific area over the next ten years": 1) problems involving regulations, standardization and costs, 2) telecommunication technology offerings vs. user requirements, 3) technological, economic and policy coordination and cooperation, 4) natural and/or imposed barriers to "free-flow" of information (including territorial invasions due to direct satellite transmissions), 5) the discrepancy between costs and affordability/availability of facilities and services to remote island nations and developing nations, and 6) military/national defense demands vs. needs of small Pacific populations.

10. In a short paragraph, discuss the advantages, disadvantages and possibilities of the Pacific Telecommunications Council setting up a computer conferencing network and electronic mail system with each member having access to the systems.
Opinions vary on this question. Most obvious and widespread is the notion that such an undertaking at this point would be impossible due to differing regulations, tarriffs and/or lack of technological hardware at various points in the Pacific area. Despite these present obstacles, many of the respondents agree that it is an option worth exploring for the future. Things to consider would be costs and availablity to PTC members and appropriateness of the technology to be used, ("Yes, yes! But not for each = all members at once. As a member of some on-line groups I am keenly aware of the amount of garbage they can generate. But small working groups of people who respect each other and have a common task can work effectively at a distance"). Suggestions for current policy development to lead to such a system for the PTC included waiting and planning "for the use of such a facility when it becomes available economically and as a general commercial offering," and "pressing for uniform tarriffs at reasonable costs to promote this form of data communication." Feelings reflected by the respondents on the opposite end are that "specific functions of the Council have not yet been established and the need for sophisticated telecommunications at this stage of the Council's development is questionable," and that "no apparent need appears to exist."

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11. Should the Pacific Telecommunications Council set up a fund for telecommunications research and development projects in the Pacific area? Discuss the pros and cons of the idea.
A small minority of the respondents indicate that the PTC should not set up a fund for telecommunications research and development projects in the Pacific area. Some members of that minority suggest that it is not a proper action to take at this time, or that it may be "redundant with work of other entities." Others, a majority of the respondents, agree that this would be a worthwhile project for the PTC to undertake over the next decade. Their qualifications for seeing value in such a fund vary. Some feel that the funds should be available to LDCs and island nations only, many feel that efforts should be made to maintain the PTC's neutrality even if such a fund were to be established. Others, who feel that this idea merits further exploration suggest that as the purposes and aimes of the PTC take shape such a fund might "give substance" to these. In the mean time, the organization should become aware of funding agencies who might "suggest topics of study in the Pacific."

12. Should the Pacific Telecommunications Council create a center for communication policy research, training and conferences? In a paragraph or two please discuss the pros and cons of the idea.
Again, a minority of the respondents object to the notion of a "center for communication policy research, training and conferences." Reasons for objecting were 1) funding problems and 2) danger of empire building. Those who have interest in such a center, but have reservations, suggest that to avoid duplication the PTC should give support to already established centers of research such as the East-West Communication Institute or at least to base such a center within a university setting. Funding problems were also a common concern of this group of respondents. Political and national conflicts which could hinder the neutrality of the PTC were forseeable problems. Many think it is an idea worth further consideration as a possible future project for the PTC.

13. Suggest a question which should be included in the next round of this activity.

THANK YOU FOR YOUR ASSISTANCE - - PLEASE RETURN THIS QUESTIONNAIRE IN THE ENCLOSED ENVELOPE.
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How can the Pacific Telecommunications Council encourage a well balanced membership?

Balance of entities is a great concern of many and a small concern of few. Most responses were concerned with an involvement in membership recruitment. The strategies varied, including membership incentives, Membership Committee actions and good advertisement of the Council. Possible policies for incentives to join were lower fees for individual members, meetings held in other "venues," subsidation to attract members from LDCs, and a continuation of the present fee scale. Concerning Membership Committee actions, it is suggested that policy be drawn up for sector/regional recruitment, active and selective recruitment of logically interested parties, and a continuation of the "good faith" approach now being used. There is great concern that the goals, needs long-term projects/activities that will be of interest to (potential) members and benefits of membership (especially to LDCs) be included in PTC literature, advertised in professional journals and represented by members when making personal contacts. On the other end of the spectrum is the opinion that "as long as there is a reasonable balance of interests and geographical areas on the Board of Trustees, there is no apparent reason to be concerned over any imbalance in the membership."

Suggest some present or potential imbalances in Pacific Telecommunications Council membership.

Those respondents who did detect membership imbalances find them in the following categories: Possible/present domination by U.S., Japanese and other "affluent country's" profit-making companies, a lack of engineers, academic-types and researchers, members from S.A and the Far East, and potential overloads of 1) one "type" of service respresentatives and 2) geographic areas. Opinion points to the need to develop membership among technocratic and operating individuals rather than manufacturing/commercial sectors "in order to provide better acceptabnce and respect among prospective members."

How can these be corrected (e.g. through active recruitment of desired interest groups or organization)?

Strategies for correcting these imbalances include: active recruitment of members where there is scant membership - engineers, academician and researchers, a diminishing of members in the manufacturing/commercial sectors until other "types catch up, a balancing of activities/projects to interest a broad scope of members, active encouragement of membership from LDCs, and limiting distribution by classification.

What are the characteristics of entities/individuals that should be recruited as potential members and how should the Pacific Telecommunications Council go about it?

One respondent summed up the desired characteristics of members as suggested by many of the others comprehensively: "Knowledge and experience in technology and its application to meet communication needs of the Pacific area or the need for such knowledge and experience plus a true interest in promoting the development of telecommunication services throughout the Pacific." Other suggestions included membership by invitation, interest, clear definition of the Council's goals, needs and projects appearing in all PTC literature, and guidelines set up for the Membership Committee by the Council.

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PACIFIC TELECOMMUNICATIONS COUNCIL

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POLICY DELPHI

FINAL ROUND

In this final round of the Pacific Telecommunications Council Policy Delphi, you will find a short summary of the answers received in the first round. After reading the summaries, please respond to the follow-on question. Please keep in mind Pacific Telecommunications Council PREFERRED directions over the next ten years.

·FIRST ROUND QUESTION:

In regard to the PTC Conferences:

·RESULTS SUMMARY:

A general feeling of satisfaction was indicated by the Pacific Telecommunications Council Board of Trustees in regard to current PTC Conference policy, and a continuation of the same annual Conference seems in order. However, a major difference of opinion appeared over Conference location. There was an even split between respondents wishing to see the Conference remain in Honolulu and those who prefer to see the location rotate. Statements justifying both positions were for practical reasons. The existence of "adequate [conference] facilities" was the arguement of one respondent in favor of keeping Honolulu as the Conference location. Those supporting a rotating schedule were of the opinion that varying the Conference location would "help create interest among the participants and host country" [in the Pacific].

·FOLLOW-ON QUESTION:

Please react to these positions. You may wish to support either side OR you may wish to express an entirely different notion.

·FIRST ROUND QUESTION:

Concerning Pacific Telecommunications Council membership:

·RESULTS SUMMARY:

The respondents expressed a variety of concerns regarding Pacific Telecommunications Council membership policy. The balance of entities appeared to be of highest concern. Only a few respondents regarded "balance" to be of little concern. It was suggested that policies be formulated by the Membership Committee for sector or regional recruitment and active and selective recruitment of "logically interested parties" to insure a good balance of entities.

Possible or present imbalances cited included four types: 1) domination by U.S., Japanese and other "affluent country's" profit-making companies; 2) a lack of engineers, researchers and academic-types; 3) members from South America, the Far East and less developed countries; and 4) potential overloads of a) one "type" of service respresentative and b) geographic area.

Differing opinions were also evident. As long as there is a reasonable balance of interests and geographical areas on the Board of Trustees, there is no apparent reason to be concerned over any imbalances in the membership.

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So, the two main positions concerning the balance in membership were that 1) action must be taken to insure a good balance in Pacific Telecommunications Council membership and 2) that balance need only be maintained on the board level.

·FOLLOW—ON QUESTION:

What are your preferences in this area? Can you suggest any guidelines that may be formed concerning Pacific Telecommunications Council membership?

·FIRST ROUND QUESTION:

Article IV (Membership) of the Pacific Telecommunications Council Charter reads ". . . Application for membership is invited from all individuals, entities, organizations, and institutions having an interest in telecommunications and related developments in the Pacific area . . . " *How would you define the Pacific area?*

·RESULTS SUMMARY:

A majority of the respondents gave very specific definitions of the Pacific area. One example reflects the feelings of that majority: "The Pacific area comprises the Pacific Ocean and the countries within or adjacent to its contiguous seas." Other definitions included "those with heaviest transpacific traffic," "those countries that can be accessed through the Pacific Ocean Satellite System," "excluding the USSR," while others thought to include China, India, the USSR, North, Central and South America, and all Pacific island nations. Some more general definitions included "the wide world," some European countries and other entities which have interests in the Pacific. It was also suggested that no definition is necessary unless there is an unforeseen situation in which an entity or individual is denied membership because it is judged not to have an interest in telecommunications in the Pacific area.

·FOLLOW—ON QUESTION:

The following four categories represent the respondent's positions. Choose one or more and make any comments you feel necessary for or against the approach.

a. Defining by geographical area:

b. Defining by function:

c. Open or general definition:

d. Other

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·FIRST ROUND QUESTION:

Suggest some alternative Pacific Telecommunications Council sources of funding other than membership fees.

·RESULTS SUMMARY:

Ideas for PTC funding were abundant. The most frequently suggested option was to obtain grants from "neutral" foundations (i.e. National Science Foundation, Japan Society for the Promotion of Science, Ford, Carnegie, etc.). A common concern was that the funding agencies or governments supplying funds not set conditions on the use of the monies. Other suggestions included fees from PTC Conference attendance by non-members, fees for PTC sponsored seminars, sale of publications, conference income/vendor fees, and services rendered (i.e. consultations).

FOLLOW-ON QUESTION:

Which suggestions do you see as most desirable? Are there others?

·FIRST ROUND QUESTION:

What services, if any, should the Pacific Telecommunications Council provide for its members over the next ten years?

·RESULTS SUMMARY:

Here, information oriented services were most commonly suggested as desirable offerings to members by the Pacific Telecommunications Council. The list included a newsletter, Board Meeting minutes, a Membership Directory, a Human Resources Directory, reports on telecommunication support of social services, "accessible listings: experts, bibliographic, organizations," education (i.e. lobbying) publications to include a "manual of regulations, rates and service offerings of carriers and/or administrations in the Pacific area," market projections, product requirements and forthcoming services. Other responses suggested policies which would establish the PTC as a "coordinating" entity for various international endeavors (satellite systems, etc.), and organizing or sponsoring seminars on relevant topics.

·FOLLOW-ON QUESTION:

If one or more of these interest you specifically, could you please provide a short paragraph or two explaining how you see the service carried out? Are there other services?

·FIRST ROUND QUESTION:

What types of information (and how often and what form) should Pacific Telecommunications Council members receive about the organization?

·RESULTS SUMMARY:

Two major policy positions emerged concerning information generated by the Council and distributed to the members. First, for important information (PTC activities, financial matters, membership) a quarterly

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or bi-monthly newsletter should be produced. Second, information distributed by the Pacific Telecommunications Council should not be limited to internal PTC affairs. An effort should be made to include reports on projects and relevant developments occurring in the Pacific area, especially telecommunications projects in developing nations. It is further suggested that the policy on this question remain open enough to ensure flexibility in the event that new needs be defined by the members.

·FOLLOW–ON QUESTION:

Should a publication policy be developed? If so, what would be some major considerations?

·FIRST ROUND QUESTION:

Should any or all official Pacific Telecommunications Council publications be printed in languages other than English?

·RESULTS SUMMARY:

Most respondents felt that printing publications in English is sufficient. However, a noticeable minority felt that major publications and publications intended for specific geographic areas (i.e. seminar announcements) should be made available in other major languages such as Japanese and Spanish. (According to one comment, "there are 10 Spanish speaking countries in the Pacific basin.") Some felt that for the immediate future or until funds are made available for translation, most publications should remain in English, but that it is an important issue to be discussed later.

·FOLLOW–ON QUESTION:

Should we identify "incountry" Pacific Telecommunications Council laisons that can act as language or printed matter interpreters? If so, which countries? Should they be paid in any way?

·FIRST ROUND QUESTION:

List the key purposes of the Pacific Telecommunications Council as you see them ten years from now (1990).

·RESULTS SUMMARY:

Several themes ran through the responses to this question. The "purposes" included were:

a. that the PTC should provide an "active forum" for the exchange of ideas
b. that the PTC should coordinate and cooperate with other related international organizations on projects
c. that the PTC should provide information services or an exchange point (clearinghouse) for developing nations and other special interest groups
d. that the PTC should "foster awareness" of and promote telecommunications technological changes, uses, and alternatives, especially in respect to developing areas of the Pacific (i.e. "the development of a regional satellite communication system" and "the development of natural resources using satellites)

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e. that the PTC should hold conferences, sub-conferences, seminars and lectures (on specific topics)
f. that the PTC should "disseminate research findings, "perhaps through cooperation with educational institutions in the Pacific area"
g. that the PTC should oversee regulatory issues (standards, costs, etc.)
h. That the PTC should "foster friendship"

·FOLLOW—ON QUESTION:

Do you have additional suggestions or elaborations on these possible future PTC purposes?

·FIRST ROUND QUESTION:

As you see it, what are some significant communication problems in the Pacific area that the Pacific Telecommunications Council may need to address over the next ten years?

·RESULTS SUMMARY:

Respondents identified the following:

a. problems involving regulations, standardizations and costs
b. telecommunications technology offerings vs. user requirements
c. technological, economic and policy coordination and cooperation among nations in the Pacific area
d. natural and/or imposed barriers to "free-flow" of information (including territorial invasions due to direct satellite transmissions)
e. the discrepancy between costs and affordability/availability of facilities and services to remote island nations and developing nations
f. efficient use of telecommunications to encourage international trade
g. military and/or national defense demands vs. needs of small Pacific populations

·FOLLOW—ON QUESTION:

Are there other problems/issues *that come to your mind? Please describe the role PTC can play in them OR any of the above problems.*

·FIRST ROUND QUESTION:

In a short paragraph, discuss the advantages, disadvantages and possibilities of the Pacific Telecommunications Council setting up a computer conferencing network and electronic mail system with each member having access to the systems.

·RESULTS SUMMARY:

Opinions vary on this question. Most obvious and widespread is the notion that such an undertaking at this point would be impossible due to costs, differing regulations, tariffs and/or lack of technological hardware at various points in the Pacific area. Despite these present obstacles, many of the respondents agreed that it is an option worth exploring for the future. Things to consider would be cost and avail-

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ability to PTC members and for appropriateness of the technology to be used. One respondent who is presently a member of some on-line groups was particularly enthusiastic about the possibility, but had some reservations: "Not for [all] members at once . . . I am keenly aware of the amount of garbage [such groups] can generate. But small working groups of people who respect each other and have a common task can work effectively at a distance."

Suggestions for current policy development to lead to such a system for the PTC included waiting and planning "for the use of such a facility when it becomes available economically and as a general commercial offering," and "pressing for uniform tariffs at reasonable costs to promote this form of data communication."

Feelings on the opposite end of the spectrum were that "specific functions of the Council have not yet been established and the need for sophisticated telecommunications at this stage of the Council's development is questionable," and that "no apparent need appears to exist."

·FOLLOW-ON QUESTION:

No further question at this time - although comments can be contributed about future actions of the PTC in this regard.

·FIRST ROUND QUESTION:

Should the Pacific Telecommunications Council set up a fund for telecommunications research and development projects in the Pacific area? Discuss the pros and cons of the idea.

·RESULTS SUMMARY:

A small minority of the respondents indicated that the PTC should not set up a fund for telecommunications R & D projects in the Pacific area. Some members of that minority suggested that it is not a proper action to take at this time, or that it may be "redundant with work of other entities."

Others, a majority of the respondents, agreed that this would be a worthwhile direction for the PTC to take over the next decade. Their justifications for seeing value in such a fund varied. Some felt that the funds should be available to less developed countries and island nations only. Many felt that efforts would have to be made to maintain the PTC's neutrality even if such a fund were to be established. Concerning this, one respondent questioned whether such a fund might cause conflicts between PTC members. Others, who felt that this idea merits further exploration suggested that as the purposes and aims of the PTC take shape, such a fund might "give substance" to these and create a "base for competence." It was further encouraged that in the mean time, the organization should become aware of funding agencies who might "suggest topics of study in the Pacific."

·FOLLOW-ON QUESTION:

What steps do you feel should be taken by the Pacific Telecommunications Council in order to take a clear direction on funding telecommunications R & D projects?

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·FIRST ROUND QUESTION:

Should the Pacific Telecommunications Council create a center for communication policy research, training and conferences? In a paragraph or two please discuss the pros and cons of the idea.

·RESULTS SUMMARY:

Again, a minority of the respondents objected to the notion of a "center for communication policy research, training and conferences." Reasons for objecting were 1) funding problems and 2) danger of empire building. Those who have interest in such a center, but have reservations, suggested that to avoid duplication the PTC should give support to already established centers of research such as the East-West Communication Institute or at least to base such a center within a university setting. Funding problems were also a common concern within this group of respondents. Political and national conflicts which could hinder the neutrality of the PTC were foreseeable problems. Many thought it was an idea worth further consideration as a possible future project for the PTC.

·FOLLOW-ON QUESTION:

What might be some policy directions or actions concerning a PTC center for policy research, training and conferences?

Thank you for your time and expertise. Results of this final round will be distributed to each PTC Board Member.

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Appendix D

University of Hawaii at Manoa

Department of Communication
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Telephone: (808) 948-8715 • Cable Address: UNIHAW

January 12, 1981

Mr. Jorge Kanahuati
V.P. of Expansion
Televisa, S. A.
Ninos Heroes 27-5o Piso
Mexico, 7 D.F.

Dear Mr. Kanahuati,

I am pleased to be able to present you and the Board of Trustees with a preliminary report of the final round of the Pacific Telecommunications Council Policy Delphi.

The "follow-on summaries" reflect an overview of the responses to the final round. In this round, 15 surveys, (approximately 45%) were returned (compared to 23 - approximately 67% returned in the first round.) The responses seemed to represent a broad spectrum of interests on the Board of Trustees. Because I had anticipated a greater number of responses, this report is preliminary in nature. Hopefully more surveys will be returned at the Conference. I trust that you will find these results interesting and useful.

As a guide, the report is set up as follows: First Round Question, Results Summary, Follow-on Question, and Follow-on Summary. By organizing the report in this way, the reader will be able to follow thoughts in previous rounds. The entire report, then, should give an overall idea of how the respondents viewed the various issues, problems and questions brought forth in this survey.

I have enjoyed working with the PTC on this project. Mr. Barber and Dr. Wedemeyer have been most helpful to me through all phases of planning and execution. In the near future I will be formulating some possible policy recommendations based on the responses to this survey.

Thank you for your support in this project.

Sincerely yours,

Kari J. Anderson

Kari J. Anderson
Project Monitor

AN EQUAL OPPORTUNITY EMPLOYER

PACIFIC TELECOMMUNICATIONS COUNCIL

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POLICY DELPHI

FINAL ROUND

PRELIMINARY REPORT

In this preliminary report of this final round of the Pacific Telecommunications Council Policy Delphi, you will find the first round question followed by a short summary of the answers received in the first round, a follow-on question and a short summary of the answers received in the final round.

●·FIRST ROUND QUESTION:

In regard to the PTC Conferences:

·RESULTS SUMMARY:

A general feeling of satisfaction was indicated by the Pacific Telecommunications Council Board of Trustees in regard to current PTC Conference policy, and a continuation of the same annual Conference seems in order. However, a major difference of opinion appeared over Conference location. There was an even split between respondents wishing to see the Conference remain in Honolulu and those who prefer to see the location rotate. Statements justifying both positions were for practical reasons. The existence of "adequate [conference] facilities" was the arguement of one respondent in favor of keeping Honolulu as the Conference location. Those supporting a rotating schedule were of the opinion that varying the Conference location would "help create interest among the participants and host country" [in the Pacific].

·FOLLOW-ON QUESTION:

Please react to these positions. You may wish to support either side OR you may wish to express an entirely different notion.

·FOLLOW-ON SUMMARY:

The greatest number of responses concerning the Conference site preferred a rotating schedule (i.e. Honolulu - 1981, Sydney - 1982, Honolulu - 1983, Suva - 1984, etc.). Most of these respondents justified their positions stating that Honolulu is not the only city in the Pacific area with adequate conference facilities. Other locations named were Tokyo, Auckland, Suva, Sydney, Rarotonga, Tahiti and Samoa. Despite this, many of them also pointed out that there would be definite organizational problems in other locations. (With adequate planning it was felt that these problems could be overcome.) On the other hand, Honolulu has the benefit of the Pacific Telecommunications Council permanent staff and additional support from the University of Hawaii, the East-West Center and Hawaiian Telephone Company, making it the preferred location of many other respondents. Central location and good transportation were other reasons for maintaining Honolulu as the permanent Conference site. Others stated that Honolulu was preferable for the next several years, and after the PTC has its "feet on the ground," a rotating Conference schedule could be considered. An alternative solution to the problem was suggested by a few respondents: They suggested that Honolulu be the annual conference location and that 1-2 day seminars with specific themes be held in conjunction with Board Meetings throughout the Pacific area.

●·FIRST ROUND QUESTION:

Concerning Pacific Telecommunications Council membership:

·RESULTS SUMMARY:

The respondents expressed a variety of concerns regarding Pacific Telecommunications Council membership policy. The balance of entities appeared to be of highest concern. Only a few respondents regarded "balance" to be of little concern. It was suggested that policies be formulated by the Membership Committee for sector or regional recruitment and active and selective recruitment of "logically interested parties" to insure a good balance of entities.

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Possible or present imbalances cited included four types: 1) domination by U.S., Japanese and other "affluent country's" profit-making companies; 2) a lack of engineers, researchers and academic-types; 3) members from South America, the Far East and less developed countries; and 4) potential overloads of a) one "type" of service respresentative and b) geographic area.

Differing opinions were also evident. As long as there is a reasonable balance of interests and geographical areas on the Board of Trustees, there is no apparent reason to be concerned over any imbalances in the membership.

So, the two main positions concerning the balance in membership were that 1) action must be taken to insure a good balance in Pacific Telecommunications Council membership and 2) that balance need only be maintained on the board level.

·FOLLOW-ON QUESTION:

What are your preferences in this area? Can you suggest any guidelines that may be formed concerning Pacific Telecommunications Council membership?

·FOLLOW-ON SUMMARY:

Two-thirds of the respondents felt that a policy which insures a balance of members on the Board of Trustees is logical and preferable. "Composition of [the] Council will be continually changing as evidenced in [the] first year. Therefore . . . . emphasis should be on Board of Trustees composition which should reflect the varied views of areas; industry, government and academic." With some effort put forth by the Membersbip Committee, this could be accomplished. Some suggested that membership balance is "self-correcting" and "if the organization is perceived to have benefit, the 'right' members will join." This statement reflects a minority view which believes no membership policy is needed. Another minority view favored some formula for a quota or ratio system. Only one respondent believed it was necessary to have an overall balance in the membership. Still another respondent suggested the formulation of an ad hoc committee to address the problem.

●·FIRST ROUND QUESTION:

Article IV (Membership) of the Pacific Telecommunications Council Charter reads ". . . Application for membership is invited from all individuals, entities, organizations, and institutions having an interest in telecommunications and related developments in the Pacific area . . . " *How would you define the Pacific area?*

·RESULTS SUMMARY:

A majority of the respondents gave very specific definitions of the Pacific area. One example reflects the feelings of that majority: "The Pacific area comprises the Pacific Ocean and the countries within or adjacent to its contiguous seas." Other definitions included "those with heaviest transpacific traffic," "those countries that can be accessed through the Pacific Ocean Satellite System," "excluding the USSR," while others thought to include China, India, the USSR, North, Central and South America, and all Pacific island nations. Some more general definitions included "the wide world," some European countries and other entities which have interests in the Pacific. It was also suggested that no definition is necessary unless there is an unforeseen situation in which an entity or individual is denied membership because it is judged not to have an interest in telecommunications in the Pacific area.

·FOLLOW-ON QUESTION:

The following four categories represent the respondent's positions. Choose one or more and make any comments you feel necessary for or against the approach.

a. Defining by geographical area:

b. Defining by function:

c. Open or general definition:

d. Other

·FOLLOW-ON SUMMARY:

Several respondents preferred to define the Pacific area strictly in the geographic sense. However, as many respondents felt that a geographic definition should the primary criterion, but that "function or interest should be considered in evaluating membership applications which do not fit the geographical constraints," (such as France - French Polynesia, and the United Kingdom - Pacific Commonwealth). Other respondents who preferred an open or general definition agreed that "there seems to be little danger from a prospective member who does not have an 'interest' in the Pacific." A definition including geographical and functional elements seems to be in order.

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● FIRST ROUND QUESTION:

Suggest some alternative Pacific Telecommunications Council sources of funding other than membership fees.

· RESULTS SUMMARY:

Ideas for PTC funding were abundant. The most frequently suggested option was to obtain grants from "neutral" foundations (i.e. National Science Foundation, Japan Society for the Promotion of Science, Ford, Carnegie, etc.). A common concern was that the funding agencies or governments supplying funds not set conditions on the use of the monies. Other suggestions included fees from PTC Conference attendance by non-members, fees for PTC sponsored seminars, sale of publications, conference income/vendor fees, and services rendered (i.e. consultations).

· FOLLOW-ON QUESTION:

Which suggestions do you see as most desirable? Are there others?

· FOLLOW-ON SUMMARY:

Again, there was a wide variety of suggestions for Pacific Telecommunications Council funding. While they were not very different from the ideas suggested in the first round, some new concerns which could guide policy were brought forth.

In particular, two respondents emphasized that funding should be in accordance with PTC sanctioned projects, (conferences, seminars, etc.). One respondent felt that now annual membership fees, vendor fees from the annual Conferences, Conference fees and publication sales produces enough revenues "to finance an operating budget according to the activities that the Council carries out." If other activities are proposed, additional funds should be sought.

Funding from "neutral" foundations (see above), or at least the clarification of the neutral use of funds derived from "large [profit/non-profit] organizations" was suggested in this round, ("dollars are dollars - get it where you can with minimal (hopefully no) strings attached"). One respondent felt that funding (from "neutral" foundations) would be inappropriate "for such an industrial-applied organization" (as PTC). Another suggested that "with tax-exempt status PTC might try to obtain funds from donors who need a tax write-off." So, in this round the possibility of obtaining monies from profit/non-profit sources was encouraged so long as the unbiased use of the funds is insured.

● FIRST ROUND QUESTION:

What services, if any, should the Pacific Telecommunications Council provide for its members over the next ten years?

· RESULTS SUMMARY:

Here, information oriented services were most commonly suggested as desirable offerings to members by the Pacific Telecommunications Council. The list included a newsletter, Board Meeting minutes, a Membership Directory, a Human Resources Directory, reports on telecommunication support of social services, "accessible listings: experts, bibliographic, organizations," education (i.e. lobbying) publications to include a "manual of regulations, rates and service offerings of carriers and/or administrations in the Pacific area," market projections, product requirements and forthcoming services. Other responses suggested policies which would establish the PTC as a "coordinating" entity for various international endeavors (satellite systems, etc.), and organizing or sponsoring seminars on relevant topics.

· FOLLOW-ON QUESTION:

If one or more of these interest you specifically, could you please provide a short paragraph or two explaining how you see the service carried out? Are there other services?

· FOLLOW-ON SUMMARY:

Although a wide variety of examples were given, an overriding theme appeared in many of the responses to this question: an information exchange system should be a future goal of the Pacific Telecommunications Council. Some suggested that a newsletter which contains information on relevant topics (i.e. new technologies, new products, new services and rates, change in regulations,etc.) would be sufficient. Others wish to see a more extended service in which the PTC holds a "coordinating role for various international research and survey activities," and would provide a "synthesized digest that [would] enable members to be broadly aware of developments across the total spectrum [of telecommunications in the Pacific area] allowing the reader to obtain an overview." An "ultimate" goal suggested by one respondent was an "efficient data base/data communications system (informational) the development of which is based upon PTC member cooperation in all areas of design and implementation." Still another respondent suggested an on-going program in which the "objective should be to develop interest in sharing common resources such as satellite systems among a number of users in order to achieve savings from economies of scale."

(Continued)

In all, the respondents apparently feel the need for the Pacific Telecommunications Council to establish an information link between parties with common interests.

● · FIRST ROUND QUESTION:

What types of information (and how often and what form) should Pacific Telecommunications Council members receive about the organization?

· RESULTS SUMMARY:

Two major policy positions emerged concerning information generated by the Council and distributed to the members. First, for important information (PTC activities, financial matters, membership) a quarterly or bi-monthly newsletter should be produced. Second, information distributed by the Pacific Telecommunications Council should not be limited to internal PTC affairs. An effort should be made to include reports on projects and relevant developments occurring in the Pacific area, especially telecommunications projects in developing nations. It is further suggested that the policy on this question remain open enough to ensure flexibility in the event that new needs be defined by the members.

· FOLLOW-ON QUESTION:

Should a publication policy be developed? If so, what would be some major considerations?

· FOLLOW-ON SUMMARY:

Several respondents expressed that a publication policy should be developed that would "give direction and be consistent with the activities of the PTC." An appropriate policy would include types of publications, information content and timing. One respondent thought it was too early to develop a publication policy while another suggested that "an ad hoc effort to develop a policy should be initiated to determine costs and sources of funding for reports" . . . (on various telecommunications projects and developments in the Pacific area).

Other responses to this question concentrated on content. Carrying over the notion of a newsletter, these respondents hoped to see a publication produced which reports on topics relevant to telecommunications developments in the Pacific area, and the goals and activities of the Council and Conference.

Aside from newsletters, other types of publications were encouraged on a "need" or "interest" basis. For instance, reports on telecommunications projects in the Pacific area, and a "compilation of abstracts from various existing publications with references to specific articles," would be encouraged.

One respondent felt that "the problem with publications aimed at a membership representing such diverse interest . . . and levels of development is that there is only a small area of overlap and commonality." In other words, any publication will service only a small proportion of the members' interest.

● · FIRST ROUND QUESTION:

Should any or all official Pacific Telecommunications Council publications be printed in languages other than English?

· RESULTS SUMMARY:

Most respondents felt that printing publications in English is sufficient. However, a noticeable minority felt that major publications and publications intended for specific geographic areas (i.e. seminar announcements) should be made available in other major languages such as Japanese and Spanish. (According to one comment, "there are 10 Spanish speaking countries in the Pacific basin.") Some felt that for the immediate future or until funds are made available for translation, most publications should remain in English, but that it is an important issue to be discussed later.

· FOLLOW-ON QUESTION:

Should we identify "incountry" Pacific Telecommunications Council laisons that can act as language or printed matter interpreters? If so, which countries? Should they be paid in any way?

· FOLLOW-ON SUMMARY:

While some respondents felt that multi-lingual publications are unnecessary at this time, many others expressed that it would be a worthwhile effort. English, Japanese and Spanish are the three main languages in which

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(Continued)

some respondents felt newsletters, flyers and PTC brochures should be made available at no extra cost to members. Some suggested that Council members could be recruited to do the translation voluntarily. In cases where no one was available for translating in a particular language, the job could be contracted out to a non-member on a fee basis. There should be an additional charge to those requesting translations in other than the above mentioned languages. Also, it was suggested that a native speaker of the language into which the publication is being translated be assigned to do the translating to avoid misinterpretations.

● FIRST ROUND QUESTION:

List the key purposes of the Pacific Telecommunications Council as you see them ten years from now (1990).

RESULTS SUMMARY:

Several themes ran through the responses to this question. The "purposes" included were:

a. that the PTC should provide an "active forum" for the exchange of ideas
b. that the PTC should coordinate and cooperate with other related international organizations on projects
c. that the PTC should provide information services or an exchange point (clearinghouse) for developing nations and other special interest groups
d. that the PTC should "foster awareness" of and promote telecommunications technological changes, uses, and alternatives, especially in respect to developing areas of the Pacific (i.e. "the development of a regional satellite communication system" and "the development of natural resources using satellites)
e. that the PTC should hold conferences, sub-conferences, seminars and lectures (on specific topics)
f. that the PTC should "disseminate research findings, "perhaps through cooperation with educational institutions in the Pacific area"
g. that the PTC should oversee regulatory issues (standards, costs, etc.)
h. That the PTC should "foster friendship"

FOLLOW-ON QUESTION:

Do you have additional suggestions or elaborations on these possible future PTC purposes?

FOLLOW-ON SUMMARY:

Most respondents agreed that the primary purpose of the Pacific Telecommunications Council should be to provide an "active forum" for the exchange of ideas. It was suggested that by doing so, b, c, d, e, f, and h (see above) would be satisfied to a limited degree. Other concerns included prioritizing purposes or activities to be undertaken by the PTC, and using caution in order to avoid duplicating services offered elsewhere. ("PTC should avoid trying to be everything for everybody!") Another "group" of common concerns focused on identifying telecommunication issues in the Pacific area and focusing on unmet needs of small island nations. ("Just because a service exists does not mean it is accessable.")

● FIRST ROUND QUESTION:

As you see it, what are some significant communication problems in the Pacific area that the Pacific Telecommunications Council may need to address over the next ten years?

RESULTS SUMMARY:

Respondents identified the following:

a. problems involving regulations, standardizations and costs
b. telecommunications technology offerings vs. user requirements
c. technological, economic and policy coordination and cooperation among nations in the Pacific area
d. natural and/or imposed barriers to "free-flow" of information (including territorial invasions due to direct satellite transmissions)
e. the discrepancy between costs and affordability/availability of facilities and services to remote island nations and developing nations
f. efficient use of telecommunications to encourage international trade
g. military and/or national defense demands vs. needs of small Pacific populations

FOLLOW-ON QUESTION:

Are there other problems/issues that come to your mind? Please describe the role PTC can play in them OR any of the above problems.

·FOLLOW-ON SUMMARY:

Most respondents addressed the question of the "role" of the PTC in telecommunications problems/issues in the Pacific area. They felt that the PTC should (in accordance with their responses to question 8), provide an "active forum" for hearing, reviewing, recognizing and disseminating information on specific problems/issues under consideration. This could be accomplished, for example, by holding a seminar on a certain topic and then reporting on the sessions.

Additional problems/issues were mentioned:

- National Telecommunication regulations used as non-tariff trade barriers
- Telecommunications carriers procurement profiles limited to national suppliers
- Lack of participation of users in defining telecommunications needs
- Lack of critical telecommunication and information processing skills and resources
- Need for telecommunication and information processing education
- Economic and social impact studies of future telecommunicaiton environment
- Technology transfer
- Trade policy
- Training needs and how to meet them on an international level.

Caution was advised when dealing with "touchy" subjects such as a, d and g, (see first round results summary).

·FIRST ROUND QUESTION:

In a short paragraph, discuss the advantages, disadvantages and possibilities of the Pacific Telecommunications Council setting up a computer conferencing network and electronic mail system with each member having access to the systems.

·RESULTS SUMMARY:

Opinions vary on this question. Most obvious and widespread is the notion that such an undertaking at this point would be impossible due to costs, differing regulations, tariffs and/or lack of technological hardware at various points in the Pacific area. Despite these present obstacles, many of the respondents agreed that it is an option worth exploring for the future. Things to consider would be cost and availability to PTC members and for appropriateness of the technology to be used. One respondent who is presently a member of some on-line groups was particularly enthusiastic about the possibility, but had some reservations: "Not for [all] members at once . . . I am keenly aware of the amount of garbage [such groups] can generate. But small working groups of people who respect each other and have a common task can work effectively at a distance."

Suggestions for current policy development to lead to such a system for the PTC included waiting and planning "for the use of such a facility when it becomes available economically and as a general commercial offering," and "pressing for uniform tariffs at reasonable costs to promote this form of data communication."

Feelings on the opposite end of the spectrum were that "specific functions of the Council have not yet been established and the need for sophisticated telecommunications at this stage of the Council's development is questionable," and that "no apparent need appears to exist."

·FOLLOW-ON QUESTION:

No further question at this time - although comments can be contributed about future actions of the PTC in this regard.

·FOLLOW-ON SUMMARY:

Although there was no "follow-on" question to be answered, many respondents made additional comments on the notion of a computer conferencing system for the PTC. Many thought it was worth future exploration and consideration. Some comments included:

> "In view of the difficulties [less affluent] and [remote] members have in attending PTC [Conferences] this would appear to offer a number of opportunities. Perhaps PTC [Council] could set as a goal the placement of at least one terminal in each member country with costs for use of the system [paid] by [each individual] user."

> "On a small scale [a computer conferencing system for the PTC] should be technically and economically possible in about the time it would take to plan it."

An alternative view was that:

> "The formal establishment of a conferencing network or electronic mail system should not be encouraged. As events unfold, however, it may well be found that the most efficient way of distributing information could be by having a computer library with membership access by telecommunications. This should be allowed to take place as a natural evolution paralleling the development of such systems in society at large - with the PTC being neither a front runner nor a laggard in these respects."

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● FIRST ROUND QUESTION:

Should the Pacific Telecommunications Council set up a fund for telecommunications research and development projects in the Pacific area? Discuss the pros and cons of the idea.

· RESULTS SUMMARY:

A small minority of the respondents indicated that the PTC should not set up a fund for telecommunications R & D projects in the Pacific area. Some members of that minority suggested that it is not a proper action to take at this time, or that it may be "redundant with work of other entities."

Others, a majority of the respondents, agreed that this would be a worthwhile direction for the PTC to take over the next decade. Their justifications for seeing value in such a fund varied. Some felt that the funds should be available to less developed countries and island nations only. Many felt that efforts would have to be made to maintain the PTC's neutrality even if such a fund were to be established. Concerning this, one respondent questioned whether such a fund might cause conflicts between PTC members. Others, who felt that this idea merits further exploration suggested that as the purposes and aims of the PTC take shape, such a fund might "give substance" to these and create a "base for competence." It was further encouraged that in the mean time, the organization should become aware of funding agencies who might "suggest topics of study in the Pacific."

· FOLLOW-ON QUESTION:

What steps do you feel should be taken by the Pacific Telecommunications Council in order to take a clear direction on funding telecommunications R & D projects?

· FOLLOW-ON SUMMARY:

In terms of PTC funding of telecommunications R & D projects, many respondents agreed that the following steps must be taken: 1) conduct an R & D "needs assessment" - "at some point categorize . . . and identify gaps and unions," 2) prioritize the projects according to areas with the "greatest need for improved basic services," 3) estimate costs, and 4) raise funds to cover the project budget. Most felt it would be senseless to raise funds and then find a project on which to use them. Naturally, problems of competition would arise in selecting projects to be funded.

Other suggestions included using the PTC Human Resource Directory or "information exchange" service to put people in touch with one another when a problem and possible solution can be matched, and to encourage the accessing of R & D projects which are already in progress (e.g. Australia is currently relying on ITV/SPEC information about telecommunications needs.) Actions such as these could help to avoid a "bureaucracy."

It was further suggested that a committee should be formed to investigate this question.

● FIRST ROUND QUESTION:

Should the Pacific Telecommunications Council create a center for communication policy research, training and conferences? In a paragraph or two please discuss the pros and cons of the idea.

· RESULTS SUMMARY:

Again, a minority of the respondents objected to the notion of a "center for communication policy research, training and conferences." Reasons for objecting were 1) funding problems and 2) danger of empire building. Those who have interest in such a center, but have reservations, suggested that to avoid duplication the PTC should give support to already established centers of research such as the East-West Communication Institute or at least to base such a center within a university setting. Funding problems were also a common concern within this group of respondents. Political and national conflicts which could hinder the neutrality of the PTC were foreseeable problems. Many thought it was an idea worth further consideration as a possible future project for the PTC.

· FOLLOW-ON QUESTION:

What might be some policy directions or actions concerning a PTC center for policy research, training and conferences?

· FOLLOW-ON SUMMARY:

The overall feeling derived from the responses was that a PTC center for policy research, training and conferences is not desireable at this time. Many respondents expressed that telecommunications needs and issues must be identified before such a center could be instituted. One respondent said, "the magnitude, scope and severity of the telecommunications needs and voids have not, in my opinion, been clearly enough defined, evaluated and prioritized to intelligently construct a solution-oriented activity." However, such a center could help to solve the problems that do arise. Another felt that the Pacific Telecommunications Council could organize conferences other than the annual Conferences around the Pacific area as a beginning, (a common theme running throughout the responses to this survey) and if it is indicated, provide training and research in the future. Several others again emphasized that the Pacific Telecommunications Council should cooperate with existing institutions (the East-West Center and RITE - Japan) to avoid duplication of services found elsewhere.

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